FMC Agreement No. 201132-005



Port Authority Lease No. L-PN-264 Supplement No. 5

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made ab initio as of the first day of October, 2002, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called the "Port Authority") and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called the "Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (the said agreement of lease, as it has heretofore been amended, modified and supplemented, being hereinafter called the "Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to add to the premises under the Lease and to amend the Lease in certain other respects;

NOW, THEREFORE, for and in consideration of the foregoing and the agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

- 1. In addition to the premises heretofore let to the Lessee under the Lease, the letting of which shall continue in full force and effect upon all the terms, provisions, covenants and conditions of the Lease, the Port Authority hereby lets to the Lessee and the Lessee hires and takes from the Port Authority at Port Newark (hereinafter called the "Facility") in the City of N ewark, in the County of Essex and State of N ew Jersey, the space shown in diagonal cross hatching outlined by the points numbered 1 through 6 on the sketch annexed hereto, marked "Exhibit A-1a" and hereby made a part hereof, together with all the buildings, structures, fixtures, improvements, additions, facilities and other property, if any, of the Port Authority located or to be located or constructed therein or thereon (the said space and all of the foregoing buildings, structures, fixtures, improvements, additions, facilities and other property, if any, of the Port Authority being hereinafter sometimes collectively called "Area A1A"), all of Area A1A to be and become a part of the premises under the Lease from and after October 8, 2002 (said date being hereinafter called the "Area A1A Commencement Date"), at 12:01 o'clock A.M. and continuing through the expiration or earlier termination of the Lease.
- 2. The Lessee shall use Area A1A for the purposes set forth in the Section of the Lease entitled "Rights of User" and for no other purpose whatsoever.

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- 3. (a) The Lessee shall pay to the Port Authority a basic rental for Area A1A (the "A1A Basic Rental") as follows:
 - (1) For the period from the Area A1A Commencement Date through November 30, 2004, at the annual rate of Two Hundred Forty-four Thousand Two Hundred Eighty-seven Dollars and Eighty-four Cents (\$244,287.84) payable in advance in equal monthly installments of Twenty Thousand Three Hundred Fifty-seven Dollars and Thirty-two Cents (\$20,357.32) on the Area A1A Rent Commencement Date, as defined in paragraph (b) of this Section, and on the first day of each calendar month thereafter through November 30, 2004;
 - (2) For the period from December 1, 2004, through November 30, 2005, at the annual rate of Seven Hundred Thirty-two Thousand Eight Hundred Sixty-three Dollars and Twenty-eight Cents (\$732,863.28) payable in advance in equal monthly installments of Sixty-one Thousand Seventy-one Dollars and Ninety-four Cents (\$61,071.94) on said December 1, 2004, and on the first day of each calendar month thereafter through November 30, 2005;
 - (3) For the period from December 1, 2005, through November 30, 2010, at the annual rate of Nine Hundred Seventy-seven Thousand One Hundred Fifty-one Dollars and No Cents (\$977,151.00) payable in advance in equal monthly installments of Eighty-one Thousand Four Hundred Twenty-nine Dollars and Twenty-five Cents (\$81,429.25) on said December 1, 2005, and on the first day of each calendar month thereafter through November 30, 2010, as the same shall be adjusted in accordance with the provisions of Section 4 of this Agreement; and
 - For the period from December 1, 2010, throughout the balance of the term of the letting under the Lease, at an annual rate equal to the product obtained by multiplying (i) the adjusted annual basic rental for all of the premises shown on Sheets 1, 2, 3 and 4 of Exhibit A attached to the Lease pursuant to the provisions of Sections 3 and 4 of the Lease and paragraphs (d) and (e) of Section 2 of Supplement No. 4 thereto for the one-year period commencing on December 1, 2009, and ending on November 30, 2010, by (ii) a factor of Nine and Three Hundred Fourteen Thousandths Percent (.09314), subject to adjustment as set forth in the following sentences, payable in advance in equal monthly installments of one-twelfth of said annual amount on said December 1, 2010, and on the first day of each calendar month thereafter throughout the balance of the term of the letting under the Lease, as the same shall be adjusted in accordance with the provisions of Section 4 of this Agreement. The factor set forth in clause (ii) of this subparagraph (4) is the ratio of 653,858.4, being the size of Area A1A in rentable square feet, divided by 7,020,129.6, being the size in rentable square feet of the portions of the premises shown on Sheets 1, 2, 3, and 4 of Exhibit A attached to the Lease, in each case as of the effective date of this Agreement. In the event that a part of the portions of the premises shown on said sheets or a portion of Area AlA shall be surrendered to the Port Authority pursuant to written agreement with the Lessee or

additional areas at the facility shall be let to the Lessee at the same rate, and adjusted on the same basis, as set forth in Sections 3 and 4 of the Lease and paragraphs (d) and (e) of Section 2 of Supplement No. 4 thereto with respect to the portions of the premises shown on said sheets, then, in such event, the factor set forth in said clause (ii) shall be recomputed by dividing (W) the rentable square footage in Area A1A, as set forth above or, if a portion of Area A1A has been surrendered, as may be set forth in the agreement providing for such surrender, by (X) the rentable square footage in the continuing portions of the premises shown on said sheets, as set forth above, or if a part of the portions of the premises shown on said sheets has been surrendered to the Port Authority or additional areas at the facility shall be let to the Lessee at the rate set forth in said Sections of the Lease and Supplement No. 4 thereto, as set forth in the surrender agreement or the supplemental or other agreement providing for such surrender or for the letting of such additional area or areas at the facility, and rounding the result at five decimal places. In the further event that such agreement or agreements reducing the size of Area A1A or reducing or enlarging the portions of the premises let to the Lessee at the rates set forth in Sections 3 and 4 of the Lease and paragraphs (d) and (e) of Section 2 of Supplement No. 4 thereto do not set forth the size in rentable square feet of the areas surrendered or added, do not set forth the resulting size of Area A1A or of the portions of the premises let to the Lessee at such rates, and do not amend this subparagraph (4) to adjust the factor set forth in said clause (ii), or in the event that a part of Area A1A or of such portions of the premises shall be taken by condemnation or required by the Port Authority to comply with governmental requirements as provided in Section 19 of the Lease, then, in either event, the parties, acting in good faith, shall by agreement between them make such adjustment to said factor as they shall deem proper, prior to computing the basic rental for Area A1A for the one-year period commencing on December 1, 2009, and ending on November 30, 2010, as the same shall be adjusted in accordance with the provisions of Section 4 of this Agreement.

- (b) For the purposes of this Agreement the term "Area Al A Rent Commencement Date" shall mean December 1, 2003.
- 4. The Area A1A Basic Rental set forth in subparagraphs (3) and (4) of paragraph (a) of Section 3 of this Agreement, as the same may have been most recently adjusted in accordance with this Section 4, shall be adjusted during the term of the letting in accordance with the provisions of this Section 4.

(a) As used in this Section:

(1) "Index" shall mean the Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

- (2) "Area A1A Basic Rental Base Period" shall mean, as the context requires, the calendar month of November 2004 and the calendar month of November (excluding November 2029 and 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.
- (3) "Area A 1A Basic R ental A djustment P eriod" shall mean, as the context requires, the calendar month of November 2005 and the calendar month of November (excluding November 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.
- (4) "Area A1A Basic Rental Adjustment Date" shall mean, as the context requires, December 1, 2005, and each anniversary of such date which thereafter occurs during the term of the letting under this Agreement.
- (5) "Area A1A Basic Rental Percentage Increase" shall mean the percentage of increase in the Index on each Area A1A Basic Rental Adjustment Date equal to a fraction, the numerator of which shall be the Index for Area A1A Basic Rental Adjustment Period immediately preceding such Area A1A Basic Rental Adjustment Date less the Index for Area A1A Basic Rental Base Period preceding such Area A1A Basic Rental Adjustment Period by one year and the denominator of which shall be the Index for Area A1A Basic Rental Base Period preceding such Area A1A Basic Rental Adjustment Period by one year.
- (b) Commencing on each Area AlA Basic Rental Adjustment Date and for the period commencing with such Area AlA Basic Rental Adjustment Date and continuing through to the day preceding the next Area AlA Basic Rental Adjustment Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, in lieu of Area AlA Basic Rental set forth in subparagraphs (3) and (4) of paragraph (a) of this Section 3 of this Agreement the Lessee shall pay an Area AlA Basic Rental at a rate per annum equal to the greater of:
 - (1) the sum obtained by adding to the Area A1A Basic Rental payable immediately prior to such Area A1A Basic Rental Adjustment Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) the product obtained by multiplying such Area A1A Basic Rental by one hundred percent (100%) of the Area A1A Basic Rental Percentage Increase for such Area A1A Basic Rental Adjustment Date; provided, however, that for purposes of the calculation of the Area A1A Basic Rental payable for the one-year periods commencing on December 1, 2005, and December 1, 2010, the Area A1A Basic Rentals payable immediately prior to such Area A1A Basic Rental Adjustment Date shall be deemed to be the annual amounts set forth in subparagraphs (3) and (4), respectively, of paragraph (a) of Section 3 of this Agreement; or
 - (2) the product obtained by multiplying the Area A1A Basic Rental payable immediately prior to such Area A1A Basic Rental Adjustment Date

(including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) by one hundred two and five tenths percent (102.5%); provided, however, that for purposes of the calculation of Area A1A Basic Rental payable for the one-year periods commencing on December 1, 2005, and December 1, 2010, the Area A1A Basic Rental payable immediately prior to such Area A1A Basic Rental Adjustment Date shall be deemed to be the annual amounts set forth in subparagraphs (3) and (4), respectively, of paragraph (a) of Section 3 of this Agreement.

- Notwithstanding any other provision of this Agreement, the Area A1A Basic Rental that shall be payable pursuant to subparagraphs (3) and (4) of paragraph (a) of Section 3 of this Agreement and this Section commencing with each Area A1A Basic Rental Adjustment Date and continuing through to the day preceding the following Area A1A Basic Rental Adjustment Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, shall in no event exceed the product obtained by multiplying the Area AlA Basic Rental payable immediately prior to such Area AlA Basic Rental Adjustment Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) by one hundred four percent (104%); provided, however, that for purposes of the calculation of the Area A1A Basic Rental payable for the one-year periods commencing on December 1, 2005, and December 1, 2010, the Area A1A Basic Rental payable immediately prior to such Area AlA Basic Rental Adjustment Date shall be deemed to be the annual amounts set forth in subparagraphs (3) and (4), respectively, of paragraph (a) of Section 3 of this Agreement. For example, if the Area A1A Basic Rental Percentage Increase for the calendar month of November, 2005, is shown to be three percent (3%) then the Area A1A Basic Rental payable under subparagraph (3) of paragraph (a) of Section 3 of this Agreement and this Section for the one-year period commencing December 1, 2005, shall be Nine Hundred Seventy-seven Thousand One Hundred Fifty-one Dollars and No Cents (\$977,151.00) plus three percent (3%) thereof or One Million Six Hundred Thousand Four Hundred Sixty-five Dollars and Fifty-three Cents (\$1,006,465.53), but if (1) said increase is shown to be two and four tenths percent (2.4%) or less then the Area A1A Basic Rental for that one-year period shall be One Million One Hundred Thousand Five Hundred Seventy-nine Dollars and Seventy-eight Cents (\$1,001,579.78), and if (2) said increase is shown to be five percent (5%) or more then the basic annual rental for that one-year period shall be One Million Sixteen Hundred Thousand Two Hundred Thirty-seven Dollars and Four Cents (\$1,016,237.04).
- (d) In the event the Index to be used in computing any adjustment referred to in paragraph (b) of this Section is not available on the effective date of such adjustment, the Lessee shall continue to pay the Area A1A Basic Rental at the annual rate then in effect subject to retroactive adjustment at such time as the specified Index becomes available, provided, however, that the Port Authority may at its option substitute for such Index the Index for the latest preceding month then published to constitute the specified Index. In the event the United States Consumer Price Index for All Urban Consumers New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) shall hereafter be converted to a different standard reference base or otherwise revised or the United States Department of Labor shall cease to publish the United States Consumer Price Index for All Urban Consumers New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items,

unadjusted 1982-84=100), then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in the value of current United States money in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine.

- (e) If after an adjustment in Area A1A Basic Rental shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the rental adjustment for that period shall be recomputed and from and after notification of the change or adjustment, the Lessee shall make payments based upon the recomputed rental and upon demand shall pay any excess in Area A1A Basic Rental due for such period as recomputed over amounts theretofore actually paid on account of Area A1A Basic Rental for such period. If such change or adjustment results in a reduction in Area A1A Basic Rental due for any period prior to notification, the Port Authority will credit the Lessee with the difference between Area A1A Basic Rental as recomputed for that period and amounts of Area A1A Basic Rental actually paid.
- (f) If any adjustment of Area A1A Basic Rental referred to in this Section is effective on a day other than the first day of a calendar month, there shall be payable in advance on the effective date of the rental adjustment an installment of Area A1A Basic Rental equal to 1/12th of the increment of the annual Area A1A Basic Rental as adjusted multiplied by a fraction, the numerator of which shall be the number of days from the effective date of the rental adjustment to the end of the calendar month in which the rental adjustment was effective and the denominator of which shall be the number of days in that calendar month.
- 5. (a) Effective as of the date of the Lease, Section 45 of the Lease shall be deleted in its entirety and shall be of no force or effect.
- (b) Effective as of the date of the Lease, the words and figure, "Two Million Dollars and No Cents (\$2,000,000.00)", set forth in the seventeenth and eighteenth lines of Section 8B of the Lease shall be deemed deleted and the words and figure, "Three Million Eight Hundred Thousand Dollars and No Cents (\$3,800,000.00)", shall be deemed inserted in lieu thereof, and for all the purposes of the Lease the term "Wharf Rehabilitation Reimbursement Amount" shall mean up to Three Million Eight Hundred Thousand Dollars and No Cents (\$3,800,000.00).
- (c) Effective as of the date of Supplement No. 1 to the Lease, paragraph (b) of Section 6 of said Supplement No. 1 shall be deemed deleted and the following shall be deemed inserted in lieu thereof:
 - "(b) 'Rental Commencement Date' shall mean October 1, 2002."
- (d) Effective as of the date of Supplement No. 1 to the Lease, Section 12 of said Supplement No. 1 shall be deemed deleted in its entirety.

- (e) Effective as of the date of Supplement No.1 to the Lease, the words and figure, "Five Hundred Thousand Dollars and No Cents (\$500,000.00)", set forth in the eighth and ninth lines of paragraph (p) of Section 9 of said Supplement No.1 shall be deemed deleted and the words and figure, "Nine Hundred Seventy Thousand Dollars and No Cents (\$970,000.00)", shall be deemed inserted in lieu thereof, and for all the purposes of said Supplement No. 1 the term "Construction Work Reimbursement Amount" shall mean the lesser of (1) the reasonable cost, as defined in said Supplement No.1, of the Lessee's Construction Work (as also defined therein), or (2) Nine Hundred Seventy Thousand Dollars and No Cents (\$970,000.00).
- (f) Effective as of January 1, 2004, (1) paragraphs (b), (c) and (d) of Section 41 of the Lease entitled "Terminal Guarantee" shall be deemed deleted and Addendum A attached to this Agreement and incorporated by reference herein shall be deemed inserted in lieu thereof; (2) paragraphs (f) and (g) of said Section 41 shall be deemed deleted and Addendum B attached to this Agreement and incorporated by reference herein shall be deemed inserted in lieu thereof; and (3) Schedule D and Schedule E attached to the Lease shall be deemed deleted and Schedule D and Schedule E attached to this Agreement and incorporated by reference herein shall be deemed substituted therefor. From and after January 1, 2004, the Lessee shall pay the Guaranteed Rental, as defined in the Lease as amended hereby, in accordance with the provisions of said Section 41 as so amended.
- (g) On or before December 31, 2005, the Lessee shall purchase not less than four (4) straddle container carriers for use at the premises under the Lease, as amended hereby, which straddle carriers shall have an aggregate cost of not less than three million dollars and no cents (\$3,000,000.00) and the Lessee shall supply to the Port Authority evidence satisfactory to it of such purchase and of the location of such straddle carriers.
- 6. (a) The Lessee acknowledges that is has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the condition of Area A1A or the suitability thereof for the operations permitted on Area A1A by this Agreement. The Port Authority shall deliver Area A1A in its presently existing "as is" condition. The Lessee, prior to the execution of this Agreement, thoroughly examined Area A1A as existing and has found the same to be suitable and satisfactory for the operations of the Lessee contemplated and permitted under this Agreement. The Lessee agrees to and shall take Area A1A in its "as is" condition and, except as expressly provided in Section 7 of this Agreement with respect to the Remediation Work (as defined in paragraph (a) of Section 7 of this Agreement), the Port Authority shall have no obligations under this Agreement for finishing work or preparation of a ny portion of Area A1A for the Lessee's use. The Lessee agrees that no portion of Area A1A will be used initially or at any time during the letting which is in a condition unsafe or improper for the conduct of the operations of the Lessee, so that there is possibility of injury or damage to life or property, and the lessee further agrees that before any use it will immediately correct any such unsafe or improper condition.

- (b) The Lessee agrees to perform at its sole cost and expense, except as provided in paragraphs (c), (d) and (e) of this Section, all demolition work and all construction and installation work that it may require to prepare Area A1A for its use, including without limitation thereto all work necessary to prepare Area A1A for the Lessee's container operations (hereinafter sometimes called the "Area AlA Construction Work"), pursuant to the applicable provisions of the Lease, including without limitation Sections 8 and 20 thereof entitled "Construction by the Lessee", excluding paragraphs (a) and (o) of said Section 8, and for the purpose of said provisions, the term "the Lessee's Construction Work" shall be deemed to include the Area A1A Construction Work and the term "Specific Work Items" shall be deemed to include each of the individual items of work set forth in subparagraphs (1) through (4) of this paragraph. The Lessee will perform the Area A1A Construction work in compliance with the requirements of such Lease provisions, including without limitation thereto the requirement that all Area A1A Construction work be performed in accordance with a Construction Application and plans and specification approved by the Port Authority and, in the case of all Area A1A Construction Work performed subsequent to November 20, 2003, in accordance with the requirements of the plans and certifications enumerated on Exhibit S, attached hereto and herby made a part hereof, which plans and certifications, prior to the commencement of such Area A1A Construction Work, shall be delivered to the Port Authority and shall be acceptable to and approved by the Port Authority in its sole discretion. The Lessee shall perform the following items of construction work as part of the Area A1A Construction Work:
 - (1) the paving of the entire open area of Area A1A in a manner suitable for the Lessee's container operations, including the installation of any necessary lighting towers, lighting fixtures and related underground electrical, storm drain and water utility pipes, conduits, mains and wires, the excavation of all geotechnically unsuitable material, the screening of large debris from such material, the reuse of a portion of such material as a base for the new pavement and the disposal of the remaining material excavated or removed from Area A1A in connection with such paving, but excluding any material excavated, removed and disposed of as part of the Remediation Work (such paving, installation, screening, reuse and disposal being hereinafter called the "Paving Work");
 - (2) the installation of approximately two thousand three hundred (2,300) feet of twelve inch (12") water main on the premises under the Lease, as amended hereby, near Starboard Street and the disposal of any material excavated or removed from Area AlA in connection with such installation (hereinafter called the "Water Main Work");
 - (3) the demolition of the building numbered 186 at the northwest corner of the premises under the Lease, shown on Sheets 1 and 2 of Exhibit A attached to the Lease (hereinafter called the "Demolition Work"); and

- (4) the performance by the Lessee of that portion of the Remediation Work which the Port Authority shall designate by notice to the Lessee as set forth in subparagraph (2) of paragraph (a) of Section 7 of this Agreement.
- (c) (1) In consideration of the Lessee's performance of the Area AlA Construction Work, the Port Authority will pay to the Lessee the following amounts:
 - (i) the lesser of (X) the cost (as defined in paragraph (e) of this Section) of the Paving Work, or (Y) Nineteen Million Six Hundred Thousand Dollars and No Cents (\$19,600,000.00) (such lesser amount being hereinafter called the "Paving Reimbursement Amount"); and
 - (ii) the lesser of (X) the cost (as defined in said paragraph (e)) of the Water Main Work and the Demolition Work, or (Y) Six Hundred Fifty Thousand Dollars and No Cents (\$650,000.00) (such lesser amount being hereinafter called the "Additional Reimbursement Amount").
- In consideration of the Lessee's performance of the (2) Remediation Work, if the Port Authority shall request the Lessee to perform all or a part of the Remediation Work, the Port Authority will pay to the Lessee the lesser of (i) the cost (as defined in paragraph (e) of this Section) of the Remediation Work, or (ii) an amount equal to the excess of Four Hundred Thousand Dollars and No Cents (\$400,000.00) over the amount expended by the Port Authority on the investigation and remediation of the High TPH Areas (as defined in Section 7 of this Agreement) prior to the performance by the Lessee of its portion of the Remediation Work, including without limitation thereto amounts expended by the Port Authority on its portion of the Remediation Work, provided, that the cost of the Remediation Work performed by the Port Authority shall not include any costs incurred prior to the date of this Agreement. Such lesser amount is hereinafter called the "Remediation Reimbursement Amount". The Port Authority will notify the Lessee of the available amount described in clause (ii) of this subparagraph at the time the Port Authority requests the Lessee to perform a portion of the Remediation Work and will notify the Lessee of the Port Authority's good faith estimate of the cost of performing such portion of the Remediation Work; in the event that the aggregate of the Lessee's contractors' bids for performing such portion of the Remediation Work, obtained as required by subparagraph (2) of paragraph (a) of Section 7 of this Agreement, exceed the available amount described in said clause (ii), the Port Authority will adjust the portion of the Remediation Work to be performed by the Lessee so that the aggregate of such contractor bids does not exceed such available amount. The Lessee shall not be required to perform any portion of the Remediation Work which portion, if performed, would result in the cost of such Remediation Work exceeding the available amount described in clause (ii) of this subparagraph; in making

such determination, the rendered bills shall be used to determine the cost of work already performed and contractor's bids shall be used to determine the cost of work not yet performed.

- (d) The amounts set forth in paragraph (c) of this Section will be paid to the Lessee as follows: On or about the 10th day of the calendar month following the calendar month in which the Lessee commences the Paving Work, the Water Main Work, the Demolition Work or the Remediation Work, as the case may be, in the premises pursuant to the provisions of this Section and on the 10th day of each calendar month thereafter during the period of performance of such work, the Lessee shall deliver a certificate to the Port Authority signed by a responsible officer of the Lessee familiar with the subject matter which shall certify as follows:
 - (1) the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, performed by the Lessee in the preceding calendar month separately stating the cost, as defined in this Section, for which reimbursement is sought, of performing each of the Paving Work, Water Main Work, Demolition Work and Remediation Work, as the case may be, described in the certificate, the amount of the cost of each type of work which is on that date due and payable by the Lessee and the amount of such cost which on that date has a ctually been paid by the Lessee;
 - (2) except in the case of the first such certificate delivered to the Port Authority, the cumulative amount of the cost of performing each of the Paving Work, Water Main Work, Demolition Work and Remediation Work, as the case may be, paid by the Lessee from the commencement of the Area AlA Construction Work or the Remediation Work, as the case may be, to the date of the certificate and the cumulative amount of all payments made by the Lessee which are properly includible in the cost of performing each of such types of Work, from the commencement of such work to the date of the certificate;
 - (3) that there is no outstanding indebtedness known to the person executing such certificate, after due inquiry, then due for labor, wages, materials, supplies or services in connection with any construction and installation work described therein which, if unpaid, might become the basis of a vendor's, mechanic's, laborer's or materialman's statutory or similar lien or alleged lien upon such work, the premises, any part thereof or the Lessee's leasehold interest therein;
 - (4) that the portion of the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, performed by the Lessee since the last such certificate (or since the earlier of the commencement of the Area A1A Construction Work or of the Remediation Work, in the case of the first such certificate) and covered by such certificate has been performed in accordance with the terms of this Agreement and the construction application; and

(5) that attached to such certificate are copies of cancelled checks, bills or invoices marked paid by the issuer or other evidence of payment satisfactory to the Port Authority for all amounts certified as paid in such certificate.

Nothing contained in this Agreement shall be deemed or construed as a submission by the Port Authority to the application to it of any vendor's, mechanic's, laborer's or materialman's statutory or similar lien. Within forty-five (45) days after the delivery of each such certificate by the Lessee, the Port Authority shall pay to the Lessee the amount constituting the cost of performing the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, certified by the Lessee as paid in its certificate relating to the preceding calendar month less ten percent (10%) thereof and also less the amount of any claims made against the Port Authority by subcontractors, materialmen or workmen, if any, in connection with any of the work described in such certificate and not bonded or discharged prior to the date of such payment, provided, that the total of such periodic payments made by the Port Authority shall not exceed ninety (90%) of the Paving Reimbursement Amount, Additional Reimbursement Amount or Remediation Reimbursement Amount, as the case may be. Upon final completion of all of the Paving Work, of all the Water Main Work and Demolition Work, or of all the Remediation Work, as the case may be, to be performed by the Lessee as set forth in this Section, the Lessee shall submit to the Port Authority a certificate signed by a responsible officer of the Lessee familiar with the subject matter certifying: (A) that all of the Paving Work, all the Water Main Work and Demolition Work, or all of the Remediation Work, as the case may be, has been completed and was performed in accordance with the approved plans and specifications referred to in paragraph (c) of Section 8 of the Lease and the provisions of this Agreement; (B) the final cost of the Paving Work, the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be, and the total payments made by the Lessee on account of such cost; and (3) that there is no outstanding indebtedness known to the person signing such certificate, after due inquiry, then due on account of the purchase of any equipment or fixtures described in the certificate or for labor, wages, materials, supplies or services in connection with any work described therein which, if unpaid, might become the basis of a vendor's, mechanic's, laborer's or materialmen statutory or similar lien or alleged lien upon such work or upon the premises under the Lease, as amended hereby, or any part thereof, or upon the Lessee's leasehold interest therein, nor are any of the equipment or fixtures described in such certificate secured by any liens, mortgages, security interests or other encumbrances. Such certificate shall also contain a certification by the architect or engineer who sealed the Lessee's plans and specifications pursuant to the provisions of paragraph (c) of Section 8 of the Lease certifying that all of the Paving Work, all of the Water Main Work and Demolition Work, or all of the Remediation Work, as the case may be, has been performed in accordance with the approved plans and specifications. The Lessee shall also supply to the Port Authority such supporting documents and records as the Port Authority shall deem necessary to substantiate the matters set forth in the Lessee's certificate. If all of the work has been completed in accordance with said approved plans and specifications and the provisions of this Agreement, the Lessee's certificate is fully satisfactory to the Port Authority and the Port Authority has examined and approved the Lessee's certificate and such records and other documentation of the Lessee as the Port Authority shall deem necessary to substantiate such cost, the Port Authority shall finally determine the cost of

the Paving Work and the Paving Reimbursement Amount, the cost of the Water Main Work and Demolition Work and the Additional Reimbursement Amount, or the cost of the Remediation Work and the Remediation Reimbursement Amount, as the case may be. No payment made by the Port Authority to the Lessee pursuant to this paragraph (d) shall be deemed final until the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be, has been finally determined by the Port Authority, nor shall any such payment be deemed a final determination by the Port Authority of the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be. The Lessee shall permit the Port Authority by its agents, employees and representatives at all reasonable times prior to a final determination of the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be, to examine and audit the records and other documentation of the Lessee which pertain to and will substantiate such cost. If the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be, as finally determined shall exceed payments previously made of the Paving Reimbursement Amount, the Additional Reimbursement Amount or the Remediation Reimbursement Amount, respectively, whether by reason of the ten percent (10%) deductions made in connection with the prior periodic payments of such amounts or otherwise, the Port Authority will pay the same to the Lessee less the amount of any claims made against the Port Authority by subcontractors, materialmen or workmen, if any, in connection with the construction and installation work described in such certificate and not bonded or discharged prior to the date of such payment; but if the payments previously made of the Paving Reimbursement Amount, the Additional Reimbursement Amount or the Remediation Reimbursement Amount, as the case may be, exceed the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, respectively, or if any component of such payments exceed the twenty percent (20%) or other limitation set forth in the definition of cost set forth in this Section, the Lessee shall repay such excess to the Port Authority within ten (10) days after demand therefor. No amount paid by the Port Authority to the Lessee pursuant to the provisions of this paragraph shall or shall be deemed to imply that the Area A1A Construction Work or the Remediation Work has been completed in accordance with law or the provisions of this Agreement.

- (e) To the extent permitted by sound accounting practice, and subject to the terms and conditions of paragraph (d) of this Section, the sum of the following items of cost incurred by the Lessee in performing the Paving Work, Water Main Work, Demolition Work or Remediation Work shall constitute the cost thereof for the purposes of this Agreement:
 - (1) The Lessee's payments to contractors for services rendered and equipment employed in such work, including, in the case of the Paving Work, the cost of environmental sampling and testing and including in such cost, without limitation thereto, the cost of such sampling and testing as may be required by subparagraph (3) of paragraph (m) of Section 9 of the Lease, as amended by subparagraph (3) of paragraph (b) of Section 7 of this Agreement;

- (2) The Lessee's payments for supplies and materials, including, without limitation thereto, equipment installed in the premises;
- (3) The Lessee's payments to persons, firms or corporations other than construction contractors or suppliers of materials, for services rendered or rights granted in connection with such work, not including services of the types mentioned in items (4), (5) and (6) of this paragraph;
- (4) The Lessee's payments of premiums for performance bonds and for the insurance the Lessee is required to maintain in effect in accordance with the provisions of paragraphs (i), (j) and (k) of this Section 8 of the Lease during the period of construction only;
- (5) The Lessee's payments for engineering services in connection with the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, and during the period of the construction only;
- (6) The Lessee's payments for architectural, planning and design services in connection with the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be; and
- (7) The sum of the costs approved under items (4), (5) and (6) of this paragraph shall not exceed 20% of the sum of the costs approved under items (1), (2) and (3) of this paragraph; if in fact there is any such excess, such excess shall not be a part of the cost incurred by the Lessee in the performance of the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, for the purposes of this paragraph.

No payment or payments on account of administrative or other overhead costs and no payment to employees of the Lessee shall be included in the cost of the Paving Work, Water Main Work, Demolition Work or Remediation Work, whether or not allocated to the cost of the such work by the Lessee's own accounting practices. No payment to a firm or corporation wholly or partially owned by or in common ownership with the Lessee shall be included in the cost of the Paving Work, Water Main Work, Demolition Work or Remediation Work. In no event whatsoever shall the cost of any portion of the Paving Work, Water Main Work, Demolition Work or Remediation Work as finally determined and computed in accordance with the provisions of paragraph (d) of this Section and in accordance with the provisions of this paragraph (e) include any expenses, outlays or charges whatsoever by or for the account of the Lessee for or in connection with any improvements, equipment or fixtures or the performance of any work unless such are actually and completely installed in and/or made to the premises under the Lease, as amended hereby, nor shall cost include the costs of any equipment, fixture or improvements installed in the premises which are secured by liens, mortgages, other encumbrances or conditional bills of sale. Notwithstanding the provisions of subparagraph (1) of paragraph (k) of Section 9 of the Lease, the cost of the Disposal of Matter (each as defined in said subparagraph (1)) excavated as part of

the Paving Work, the Water Main Work or the Remediation Work (if the Port Authority shall request the Lessee to perform the Disposal of Matter resulting from the Remediation Work) may be included in the Lessee's cost of performing such work to be reimbursed pursuant to this Section.

- (f) The parties to this Agreement recognize that the contracts to be entered into by the Lessee for the performance of the Area A1A Construction Work may cover construction work which does not constitute Paving Work, Water Main Work, Demolition Work or Remediation Work. The Lessee shall at all times maintain, and each certificate submitted by the Lessee pursuant to this Section shall set forth, a proper breakdown and allocation of costs and payments as between the Paving Work, Water Main Work, Demolition Work, Remediation Work (if the Port Authority shall request the Lessee to perform all or a part of the Remediation Work) and other construction work at the Facility, the cost of which is not eligible for reimbursement under this Agreement, and the Lessee shall assure that each applicable contract provides for such breakdown and allocation or, in the case of work done before June 1, 2004, that the contract identifies the kind and location of work with enough specificity to allocate its cost between such categories of the Area A1A Construction Work. In submitting the statements and certifications required of the Lessee hereunder, the Lessee shall in each case specifically and separately state the amounts expended under each such contract for the portions of the Area AIA Construction Work which respectively constitute Paving Work, Water Main Work, Demolition Work and Remediation Work (if the Port Authority shall request the Lessee to perform all or a part of the Remediation Work) in addition to those portions of the construction work at the Facility, the cost of which is not eligible for reimbursement under this Agreement.
 - The Port Authority, as an undertaking collateral to the letting of Area A1A hereunder, and subject to all of the provisions of the Lease and this Agreement (including but not limited to the Section of the Lease entitled "Force through its employees, agents, representatives, contractors subcontractors, at its cost and expense, shall cause the soil in the vicinity of the four (4) locations designated as Area A, Area C, Area D and Area E (sometimes hereinafter called "High TPH Areas") on the attached drawing marked "Exhibit T" and entitled "Total Petroleum Hydrocarbons Delineation Bonngs", to be removed, disposed in accordance with all applicable Environmental Requirements, as defined in subparagraph (8) of paragraph (a) of Section 9 of the Lease, including without limitation thereto those relating to the remediation of Hazardous Substances pursuant to a remedial action work plan approved by the New Jersey Department of Environmental Protection ("NJDEP"), and replaced with fill which does not exceed the NJDEP guidances for unrestricted use. Such removal, disposal and replacement is referred to in this Agreement and the Lease, as amended hereby, as the "Remediation Work." The obligation set forth in this paragraph (a) is limited to the High TPH Areas and to the remediation work expressly set forth in this paragraph (a).
 - (2) At the election of the Port Authority, by notice to the Lessee, the Lessee shall perform the Remediation Work or that portion of the

Remediation Work set forth in the Port Authority's notice, as the case may be, subject to the provisions of this subparagraph (2) and the portion of the Remediation Work so designated by the Port Authority shall be a part of the Area A1A Construction Work. The Lessee shall perform the Remediation Work pursuant to the applicable provisions of the Lease, including without limitation Sections 8 and 20 thereof entitled "Construction by the Lessee", excluding paragraphs (a) and (o) of said Section 8, and for the purpose of said provisions, the term "the Lessee's Construction Work" shall be deemed to include the Remediation Work, provided, that the Lessee shall file a separate Construction Application for the Remediation Work distinct from those filed in connection with the performance of the rest of the Area A1A Construction Work, such Remediation Work Construction Application shall incorporate plans and specifications supplied by the Port Authority for the portion of the Remediation Work to be performed by the Lessee and may be reviewed separately from such other Construction Applications and shall be subject to separate approval by the Port Authority. The Lessee shall prepare separate cost estimates for the Remediation Work and shall obtain bids from its contractors separately setting forth the cost of performing the Remediation Work as a separate portion of the Area A1A Construction Work. The Lessee shall not perform any Remediation Work covered by the Lessee's Construction Application therefor until receiving specific Port Authority approval for such Construction Application as set forth in the Lease. Remediation Work performed by the Lessee shall be at the Lessee's expense, except as set forth in paragraphs (c), (d) and (e) of Section 6 of this Agreement. The Port Authority shall not be required pursuant to subparagraph (1) of this paragraph (a) to perform any portion of the Remediation Work which it has elected to have the Lessee perform pursuant to this subparagraph (2).

- (b) Section 9 of the Lease, entitled "Environmental Responsibilities" is hereby amended as follows:
 - (1) Paragraph (a) of said Section 9 shall be amended as follows:
 - (i) Subparagraph (4) of said paragraph (a) shall be amended to read as follows:
 - "(4) With respect to ground water, 'Analyzed Item' shall mean each of, and 'Analyzed Items' shall mean all of, the constituents for which ground water was tested and the results thereof reported (i) in the Area AlA Initial Baseline, with respect to the ground water under Area AlA, and (ii) in the Initial Environmental Survey, with respect to the ground water under all other portions of the premises, and with respect to soil, 'Analyzed Item' shall mean each of, and 'Analyzed Items' shall mean all of, the constituents for which soil was tested

and the results thereof reported (i) in the Area A1A Initial Baseline, with respect to Area A1A, and (ii) in the Initial Environmental Survey, with respect to all other portions of the premises."

- (ii) The phrase, ", and on or after the Area A1A Commencement Date, with respect to Area A1A", shall be inserted immediately after the word, "Space", and before the semi-colon appearing in the last line of clause (iii) of subparagraph (5) of said paragraph (a).
- (iii) The phrase, ", the Area AlA Construction Work, the Remediation Work (if the Lessee performs any of such work)", shall be inserted immediately after the term, "Wharf Rehabilitation Work", and before the word, "and", appearing in the sixth (6th) line of clause (iii) of subparagraph (7) of said paragraph (a).
- (iv) Subparagraph (14) of paragraph (a) of Section 9 shall be amended to read as follows:
 - "(14) 'Exhibit I' shall mean the Initial Environmental Survey, all Additional Sampling Reports and all Remediation Completion Reports, if any, together with (i) the Added Environmental Survey, from and after the Effective Date, and (ii) the Area A1A Initial Baseline, from and after the Area A1A Commencement Date, and (iii) the Area A1A Revised Baseline, from and after the Area A1A Revised Baseline Effective Date."
- (v) Subparagraph (15) of paragraph (a) of Section 9 shall be amended to read as follows:
 - "(15) 'Existing Condition' shall mean:
 - "(A) for the period from December 1, 2000 to the day immediately preceding the Effective Date, both dates inclusive, the levels of Analyzed Items in the soil and ground water for all portions of the premises as derived by applying the methodology set forth in paragraph (j) of this Section 9 to the test results in the Initial Environmental Survey, as such test results may be superceded and supplemented by the test results in each Additional Sampling Report and in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section, and

"(B) from and after the (i) Effective Date with respect to all portions of the premises except for Area AlA shall mean the levels of Analyzed Items in the soil and ground water for all portions of the premises except for Area A1A as derived by applying the methodology set forth in paragraph (i) of this Section 9 to the test results in the Initial Environmental Survey and the Added Environmental Survey, as such test results may be superceded and supplemented by the test results in each Additional Sampling Report and in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section 9, and

"(ii) from and after the Area A1A Commencement Date to the day immediately preceding the Area A1A Revised Baseline Effective Date, both dates inclusive, with respect to the portion of the premises constituting Area A1A shall mean the levels of Analyzed Items in the soil and ground water for all portions of Area A1A as derived by applying the methodology set forth in paragraph (j) of this Section to the test results in the Area A1A Initial Baseline, as such test results may be superceded and supplemented by the test results in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section, and

"(iii) from and after the Area A1A Revised Baseline Effective Date with respect to the portion of the premises constituting Area A1A shall mean for the ground water the levels of Analyzed Items in the ground water for all portions of Area A1A as derived by applying the methodology set forth in paragraph (j) of this Section 9 to the ground water test results in the Area A1A Initial Baseline Area and shall mean for the soil the levels of Analyzed Items in the soil for all portions of Area A1A as derived by applying the methodology set forth in paragraph (j) of this Section 9 to the soil test results in the Area A1A Revised Baseline, as such test results may be

superceded and supplemented by the test results in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section."

- (vi) Subparagraph (25) of paragraph (a) of Section 9 of the Lease shall be deleted and the following shall be inserted in lieu thereof:
 - "(25) 'Ground Area C' shall mean the ground area defined as 'Area A1A' in Section 1 of Supplement No. 5 to the Lease."
- (vii) The phrase, "or the Area A1A Construction Work or the Remediation Work", shall be inserted immediately after the phrase, "Lessee's Construction Work", in both instances where such phrase appears in subparagraph (30) of said paragraph (a).
- (viii) The following new subparagraphs (34) through (40) shall be inserted immediately after subparagraph (33) of paragraph (a) to read as follows:
 - "(34) 'Area A 1A' shall h ave the meaning set forth in Section 1 of Supplement No. 5 to the Lease.
 - "(35) 'Area A1A Commencement Date' shall have the meaning set forth in Section 1 of Supplement No. 5 to the Lease.
 - "(36) 'Area A1A Construction Work' shall have the meaning set forth in paragraph (b) of Section 6 of Supplement No. 5 to the Lease.
 - "(37) 'Area A1A Initial Baseline' shall mean Addendum No. 2 to Exhibit I to the Lease attached to Supplemental Agreement No. 5 of this Lease.
 - "(38) 'Area A1A Revised Baseline' shall have the meaning set forth in subparagraph (3) of paragraph (m) of this Section, as amended.
 - "(39) 'Area A1A Revised Baseline Effective Date' shall have the meaning set forth in

subparagraph (3) of paragraph (m) of this Section, as amended.

- "(40) 'Remediation Work' shall have the meaning set forth in paragraph (a) of Section 7 of Supplement No. 5 of the Lease."
- (2) The phrase, "or the performance of the Area A1A Construction Work (as defined in paragraph (b) of Section 6 of Supplement No. 5 to the Lease) or the Remediation Work (as defined in paragraph (a) of Section 7 of said Supplement No. 5, if the Lessee performs any of such work,)", shall be inserted immediately after the phrase, "(as defined in Section 8C of this Agreement)", in the eighteenth (18th) and nineteenth (19th) lines of subparagraph (1) of Paragraph (k) of Section 9 of the Lease.
- (3) The following new subparagraph (3) shall be deemed to have been inserted immediately after subparagraph (2) of paragraph (m) of said Section 9 to read as follows:
 - It is hereby recognized that as a result of the performance of the Area AlA Construction Work and the Remediation Work, a substantial portion of the subsurface soil of the premises will be disturbed, removed and/or replaced thereby causing the test results for the soil in Area A1A set forth in Addendum No. 2 to Exhibit I to be no longer relevant. The Lessee hereby agrees that prior to submitting to the Port Authority the certificate of the Lessee and of the Lessee's architect or engineer referred to in paragraph (c) of Section 8 of the Lease certifying that all of the Paving Work has been performed in accordance with the approved plans and specifications and the provisions of the Lease, the Lessee shall at its sole cost and expense (except as provided in paragraphs (c), (d) and (e) of Section 6 of Supplement No. 5 to the Lease) as part of the Paving Work (as defined in subparagraph (1) of paragraph (b) of said Section 6) and subject to the terms and provisions of Section 8 of the Lease entitled "Construction by the Lessee" and of Section 6 of Supplement No. 5 to the Lease, sample and test the soil of Area A1A for the Analyzed Items for Area A1A or the sixty (60) pollutants plus forty (40) tentatively identified compounds set forth in the latest edition of the New Jersey Department of Environmental Protection Field Sampling and Procedures Manual (the "Manual") in accordance with the Manual in not less than one location in each acre of Area A1A as specified by the Port Authority. The testing and analysis shall be performed by a laboratory with a current Data Certification in accordance

with NJAC 7:18. The Lessee shall set forth the test results of such sampling in a report, which report shall be in the same form as Exhibit I of the Lease (such report is herein referred to as the "Area A1A Revised Baseline"). All such sampling, testing and the preparation of the Area A1A Revised Baseline shall be performed by an independent consultant and laboratory licensed by the State of New Jersey. The Lessee shall deliver a copy of the Area A1A Revised Baseline to the Port Authority prior to or at the same time as the Lessee delivers to the Port Authority the certificate of the Lessee and of its architect or engineer referred to above, and after such delivery of the Area A1A Revised Baseline by the Lessee to the Port Authority the Area A1A Revised Baseline shall replace the Area A1A Baseline for all purposes under this Lease for determining the Existing Condition of the soil in Area A1A of the premises. The date of receipt by the Port Authority of the A1A Revised Baseline is herein called the "Area A1A Revised Baseline Effective Date."

- (4) (i) The phrase, ", or whose presence in, on or under Area A1A occurred after the Area A1A Commencement Date", shall be inserted immediately after the word, "any" and before the period appearing in the eighth (8th) line from the end of subparagraph (i) of paragraph (u) of said Section 9.
- (ii) The phrase, "or the obligations set forth in subparagraph (iv) of this paragraph (u), as amended by Supplement No. 5 to the Lease", shall be inserted immediately after the words and figures, "Sections 11 and 16 hereof", and before the word, "and", appearing in the third line of subparagraph (iii) of said paragraph (u).
- (iii) The following shall be inserted immediately after subparagraph (iii) of paragraph (u) as subparagraph (iv) of said paragraph (u):
- "(iv) Notwithstanding anything to the contrary in this Lease, in the event that after the performance of the Paving Work on any portion of Area AIA any Governmental Authority or any Environmental Requirement shall require, either as a condition of any approval or otherwise, that the Existing Condition on such portion of Area A1A be removed or remediated, the Lessee shall, when such removal and/or remediation is completed or upon earlier written notice from the Port Authority, expeditiously at its sole cost and expense repair and/or replace the pavement that may be damaged or destroyed by such remediation or removal on such

portion of Area AlA, including without limitation performing all required backfilling of such portion of Area AlA in accordance with all Environmental Requirements (including without limitation any remedial action work plan covering such soil removal and/or remediation)."

- (5) Addendum No. 2 and Addendum No. 3 attached hereto are hereby made a part hereof, of the Lease and of Exhibit I to the Lease.
- Work at its risk (except as expressly provided in paragraphs (c), (d) and (e) of Section 6 of this Agreement), to accommodate the needs of the Lessee's expanding business, even though sampling and testing of the groundwater at Area A1A indicate the presence of Hazardous Substances (as defined in subparagraph (26) of paragraph (a) of Section 9 of the Lease) in the soil which exceed the NJDEP soil clean up guidances for both restricted and unrestricted use and in the groundwater which exceed applicable NJDEP ground water criteria, provided, that the Port Authority shall perform, or reimburse the Lessee for performing in the manner set forth in Section 6 of this Agreement, the Remediation Work, as set forth in paragraph (a) of this Section.
 - The Port Authority has advised the Lessee that it is reluctant to permit the Lessee to perform the Paving Work until (i) all governmental approvals have been obtained with respect to addressing the presence of Hazardous Substances currently in, on or under Area A1A which exceed or are in violation of any Environmental Requirement (including without limitation the soil clean up criteria used by NJDEP and applicable NJDEP groundwater criteria), which approvals include but are not limited to, the approval by the prior tenants of Area A1A and the NJDEP of all relevant remedial action work plans for Hazardous Substances currently in, on and under Area A1A, the reclassification or waiver of classification with respect to the groundwater under Area A1A and the approval by NJDEP of the conditions upon which it will permit Area A1A to be used for container terminal operations (all of the foregoing required approvals referred to in this clause (i) being herein collectively called the "Required Environmental Approvals" and all the terms, conditions, provisions and requirements of all of the Required Environmental Approvals when given are herein referred to as the "Regulatory Environmental Conditions"), and (ii) the Port Authority has determined that it can and will comply with all the Regulatory Environmental Conditions (such determination by the Port Authority being herein referred to as the "Port Authority Environmental Determination"). Nevertheless, the Lessee has advised the Port Authority that it wishes to proceed with the Paving Work prior to all of the Required Environmental Approvals having been obtained and prior to the Port Authority Environmental Determination having been made. Without limiting any other term or condition of this Agreement, if the Lessee proceeds with the Paving Work, except as expressly provided with respect to cost reimbursement in paragraphs (c), (d) and (e) of Section 6 of this Agreement, subject to the provisions of subparagraph (2) of paragraph (b) of Section 9 of the Lease, and unless the Port Authority elects to perform all or part of the Remediation

Work itself, the Lessee shall assume all risks arising out of or in connection with all Hazardous Substances on Area A1A, all Environmental Requirements relating to Area AlA or its use and occupancy and the Paving Work, all Required Environmental Approvals, all Regulatory Environmental Conditions and the Port Authority Environmental Determination, including without limitation, the fact that not all of the Environmental Approvals may be obtained, the fact that the NJDEP may never approve, or may not continue any approval of the extent of the remediation to be performed in, on or under Area AlA or on the conditions that Area AlA may be used for container terminal operations, the fact that the Port Authority may determine that it will not comply or can not comply with all of the Regulatory Environmental Conditions (including without limitation the conditions imposed by NJDEP for use of Area A1A for container terminal operations), the fact that the NJDEP or Environmental Requirements may require remediation of the soil in, on or under Area A1A after all or some of the Paving Work has been performed which may require the removal of all or some of the Paving Work, the removal of all or part of the soil beneath the paved portion of Area A1A and the repaving of the affected portions of Area AlA, and the fact that the Hazardous Substances in, on and under Area A1A may increase the cost to the Lessee to perform the Paving Work.

The Lessee acknowledges that the Port Authority has (2) provided the Lessee results of soil sampling and testing previously performed at Area AlA entitled "Soil Sample Exceedence Plan, Semivolatile Organic Compounds"; "Soil Sample Exceedence Plan, Polychlorinated Biphenols/Pesticides"; "Soil Sample Exceedence Plan, "Inorganic Compounds; and "Soil Sample Exceedence Plan, Total Petroleum Hydrocarbon each dated December 2001, a map dated 6/27/02 entitled "Total Petroleum Hydrocarbon Excavation Areas" and an environmental report entitled "Environmental Baseline Environmental Evaluation - Former Naprano Iron and Metal Company and Metro Metals Facility (15 Acre Site) - Port Newark Port Authority Marine Terminal", dated July 2001 (hereinafter collectively called the "Subsurface Environmental Reports") which show Hazardous Substances in, on and under Area A1A that exceed NJDEP's soil clean up guidances for both restricted and unrestricted use and applicable ground water criteria. Without limiting the generality of any other term or provision of the Lease, as amended by this Agreement, including without limitation thereto paragraph (1) of Section 9 thereof and Section 22 thereof, the Lessee shall not rely on the Subsurface Environmental Reports being comprehensive or representative of the complete extent of the presence of Hazardous Substances on, under or about Area A1A. The Lessee hereby grants permission to the Port Authority, or to any third person designated by the Port Authority by notice to the Lessee, to enter upon Area AlA on seven (7) days' prior notice for the purpose of performing soil remediation of any Hazardous Substance which exceeds NJDEP's soil clean up guidances for unrestricted use and for the purpose of performing groundwater remediation of any Hazardous Substance that exceeds any applicable groundwater quality standards, it hereby being understood and agreed that, except as expressly set forth in the Lease or in this Agreement, the Port Authority shall have no obligation whatsoever to the Lessee to

perform or pay for any such remediation and no permission or approval of the Port Authority hereunder, or of the Paving Work, or in connection with either, shall be or be deemed to have imposed any obligation whatsoever on the Port Authority to perform or pay for any soil, groundwater or other remediation in, on or under Area AlA. The Lessee agrees that no performance of any remediation work in, on or under Area A1A shall constitute an eviction or constructive eviction of the Lessee nor be grounds for any abatement of fees or charges payable by the Lessee under the Permit or otherwise nor give rise to or be the basis of any claim or demand by the Lessee against the Port Authority, its Commissioners, officers, employees or agents for damages, consequential or otherwise. Further, the Port Authority shall have no obligation whatsoever to the Lessee arising out of the performance of any remediation work on, in or under Area A1A, including without limitation, any obligation to back fill the excavations, replace the millings installed on Area A1A by the Lessee, repave the affected portions of Area A1A or otherwise restore Area AlA to the condition existing immediately prior to the performance of any such remediation work. Prior to the date set forth in any notice to the Lessee from the Port Authority of the performance of any remediation work in, on or under Area A1A, the Lessee shall make available the areas designated in such notice for the performance of the remediation, including without limitation the removal of all containers and other personal property from said designated areas and the removal of required portions of the Paving Work and all millings installed by the Lessee on such designated areas.

- Paving Work by the Port Authority or any other Port Authority approvals in connection therewith, or the performance of any remediation work by the Port Authority, the Lessee or others, including without limitation any excavation or disposal of soil which contains any Hazardous Substances whether in the performance of the Paving Work or pursuant to an approved remedial action work plan or on a voluntary basis or otherwise, the Port Authority shall have no obligation whatsoever, in law or equity under the Lease, this Agreement, any Construction Application or otherwise, to the Lessee to obtain any Required Environmental Approvals, to comply with any Regulatory Environmental Conditions or Environmental Requirements, or to perform any remediation in, on or under Area A1A or to make the Port Authority Environmental Determination.
- (4) The Lessee hereby specifically acknowledges and agrees that neither this Agreement nor any approval of the Paving Work by the Port Authority nor any performance of the Paving Work nor any expenditure of monies thereon shall grant or shall be deemed to have granted any rights whatsoever in the Lessee (i) to be reimbursed by the Port Authority for the Lessee's cost of performing the Paving Work or any portion thereof, except as expressly provided in Section 6 of this Agreement, (ii) to be reimbursed by the Port Authority for the Lessee's cost of removal of any of the Paving Work or repairing of the affected portions of Area A1A, if required as provided for in this Agreement, (iii) to the performance of any Regulatory Environmental Approvals or any other Environmental Requirements by the Port Authority or any third person, or (iv) to

the Port Authority Environmental Determination being made. The Lessee understands that there may be many problems to be resolved before all Required Environmental Approvals are obtained and before the Port Authority Environmental Determination is made, and that all such problems may not be resolved. The Lessee hereby acknowledges and agrees that if it proceeds with the Paving Work covered by this Agreement, it shall do so at its sole risk being fully cognizant of the fact that the entire expenditure of monies by it on the performance of the Paving Work may be of limited or no benefit to the Lessee and without consideration in that the Lessee may not enjoy any or only limited beneficial use of the Paving Work in that remediation of Area A1A may be required after the Paving Work has been performed or NJDEP may not approve or may not continue its approval of the use of Area A1A for container terminal purposes on conditions that are acceptable to the Port Authority, and all or any other Required Environmental Approvals may not be obtained or the Port Authority Environmental Determination may not be made.

- 8. (a) The Port Authority and the Lessee have heretofore entered into a Space Permit dated as of July 12, 2001, bearing Port Authority Agreement No. MNS-263 and covering Area A1A; a Supplement to Permit, dated as of March 18, 2002, extending said permit; and a construction letter agreement dated August 23, 2002, relating to construction to be performed on Area A1A, said permit and agreement, as the same have heretofore been supplemented and amended, being hereinafter called the "Existing Agreements."
- Effective at 11:59 o'clock P.M. on the day preceding the Area A1A Commencement Date, the Existing Agreements and the permission granted the Lessee to occupy Area A1A thereunder shall be revoked with the same force and effect as if the period of the said permission were in and by the provisions of the Existing Agreements originally fixed to expire on said preceding day and the Lessee and the Port Authority each do by these presents release and discharge the other from any and all obligations of every kind whatsoever on the part of the other to be performed under the Existing Agreements with respect to Area A1A for that portion of the period of permission subsequent to said preceding day; it being understood that nothing herein contained shall release, relieve or discharge the Lessee from any liability for fees, charges or other amounts that may be due or become due to the Port Authority for any period or periods prior to said preceding day, or for breach of any other obligation on the Lessee's part to be performed under the Existing Agreements for or during such period or periods or maturing on the revocation of such permission, provided, that the construction letter agreement referred to in paragraph (a) of this Section shall remain in effect with respect to any Construction Application and plans and specifications filed by the Lessee prior to the Area A1A Commencement Date and with respect to any Area AlA Construction Work performed prior to the Area AlA Commencement Date.
- 9. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its

execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

10. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST

(Secretary)

THE PORT AUTHORITY OF NEW YORK

NEW JERSEY

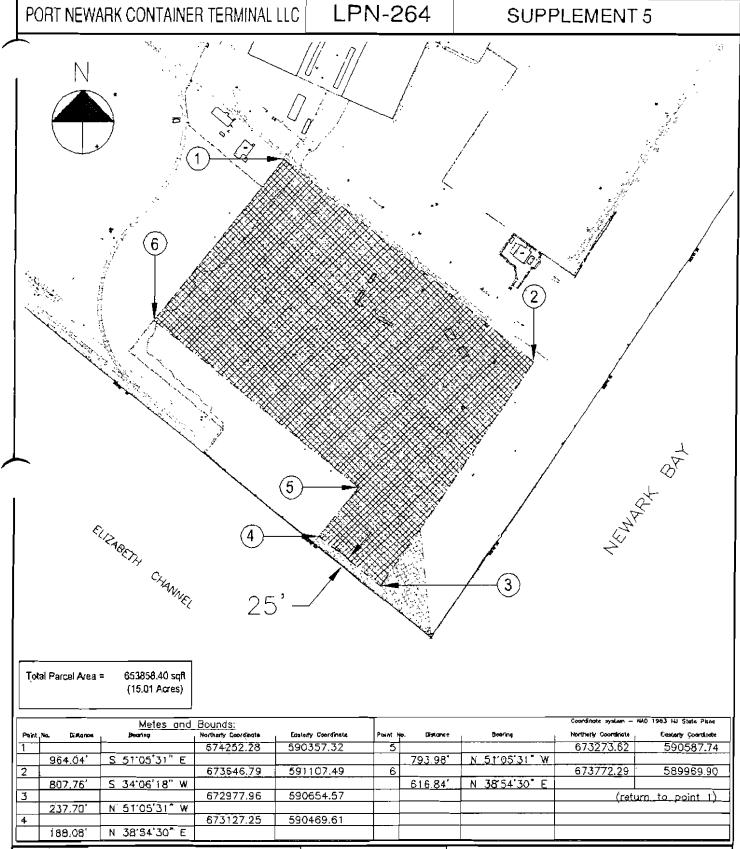
îchard M. Larrabee DIRECTOR, PORT COMMERCE DEPT.

(Seal)

WITNESS:

PORT NEWARK CONTAINER TERMINAL LLC





Initialed:

For the PORT AUTHORITY

EXHIBIT:

A-1a

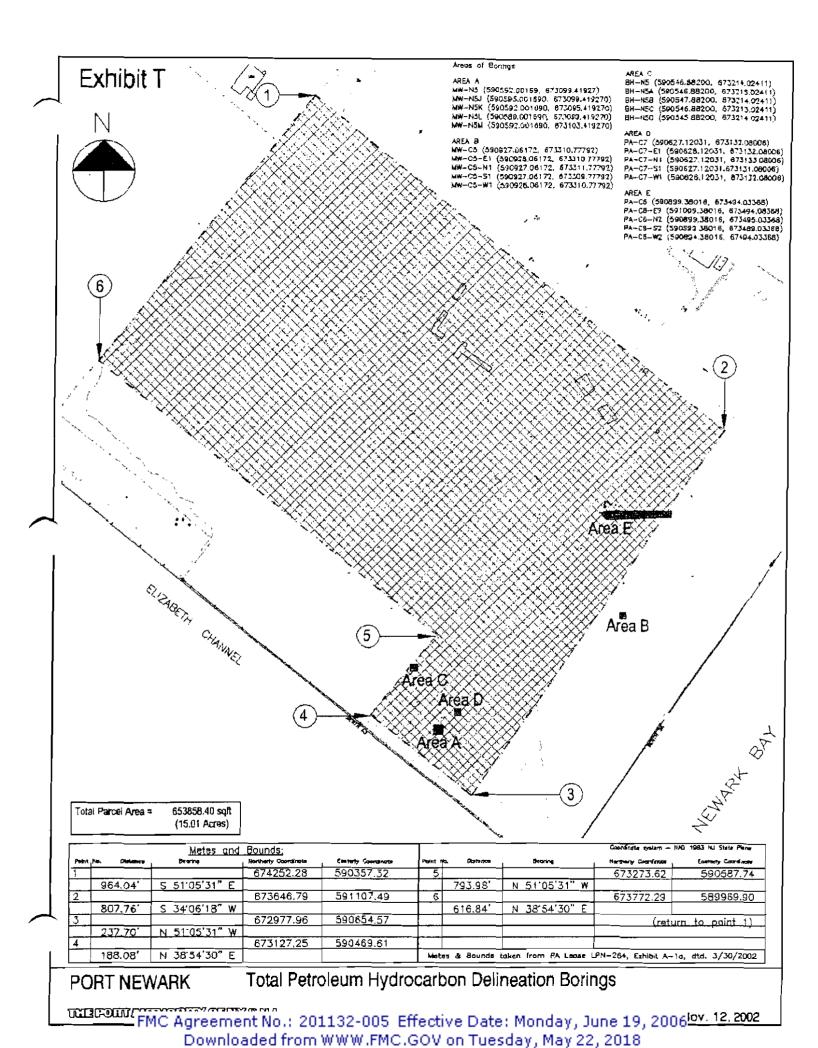
PORT NEWARK

For the Lesse FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006_

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Exhibit S

- 1. Soil Erosion and Sediment Control Plan covering the Area A1A Construction Work (as defined in the agreement to which this Exhibit S is attached) certified by the governing Soil Conservation District in accordance with the provisions of the New Jersey Soil Erosion and Sediment Control Act, Chapter 251, P.L. 1975, as amended (N.J.S.A. 4:24-39 et seq).
- 2. Authorization to Discharge Stormwater covering the Area A1A Construction Work issued by the New Jersey Department of Environmental Protection under New Jersey Pollutant Discharge Elimination System General Permit No. NJG0088323 (N.J.A.C. 7:14A-11 Appendix B) for Stormwater Discharge Associated with Construction Activity pursuant to the New Jersey Water Pollution Control Act, Chapter 74, P.L. 1977, as amended (N.J.S.A. 58:10A-1 et seq).
- 3. Excavated Material Management Plan covering the Area A1A Construction Work as approved by the Port Authority.



PNCT LLC TERMINAL GUARANTEE Schedules D and E (Effective January 1,2004)

Annual Containers Handled

Year Commencing	# of Containers (Schedule D)	60% (Schedule E)
1/1/2004	350,000	210,000
1/1/2005	355,000	213,000
1/1/2006	360,000	216,000
1/1/2007	365,000	219,000
1/1/2008	396,000	237,600
1/1/2009	401,000	240,600
1/1/2010	406,000	243,600
1/1/2011	411,000	246,600
1/1/2012	416,000	249,600
1/1/2013	421,000	252,600
1/1/2014	426,000	252,600
1/1/2015	431,000	252,600
1/1/2016	436,000	252,600
1/1/2017	441,000	252,600
1/1/2018	446,000	252,600
1/1/2019	451,000	252,600
1/1/2020	456,000	252,600
1/1/2021	461,000	252,600
1/1/2022	466,000	252,600
1/1/2023	471,000	252,600
1/1/2024	476,000	252,600
1/1/2025	476,000	252,600
1/1/2026	476,000	252,600
1/1/2027	476,000	252,600
1/1/2028	476,000	252,600
1/1/2029	476,000	252,600
1/1/2030	476,000	252,600

ADDENDUM A

- (b) The Lessee shall be subject to the payment of a guaranteed rental (hereinafter called the "Guaranteed Rental") for the Terminal Throughput Year commencing on January 1, 2004, and ending on December 31, 2004, and in each subsequent Terminal Throughput Year to occur thereafter during the term of the letting under this Agreement as follows: in the event that the number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during any such Terminal Throughput Year shall not exceed the Rent Guarantee Number for that Terminal Throughput Year, the Lessee shall pay to the Port Authority a Guaranteed Rental equal to the product obtained by multiplying
 - (1) the excess of the Rent Guarantee Number for that Terminal Throughput Year over the greater of (i) the actual number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during that Terminal Throughput Year, or (ii) the Exemption Number (as defined in subparagraph (5) of paragraph (a) of Section 5 hereof); by
 - (2) the Throughput Rental Rate in effect on the last day of that Terminal Throughput Year pursuant to the provisions of Sections 5 and 6 hereof.

Any Guaranteed Rental owed under this Section shall be paid by the Lessee to the Port Authority within ten (10) days after notification by the Porr Authority to the Lessee stating the amount thereof.

(c) Notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of three hundred fifty thousand (350,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2004, shall not be increased and shall remain at three hundred fifty thousand (350,000) for purposes of the calculation of the Guaranteed Rental in the event that the Forty-five Foot Deepening shall not have been completed by December 31, 2004. The calculation of the Guaranteed Rental shall be made based on the Rent Guarantee Number of three hundred fifty thousand (350,000) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the Rent Guarantee Number of three hundred fifty thousand (350,000) for any portion of the Terminal Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Rent Guarantee Number of three hundred fifty-five thousand (355,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Forty-five Foot Deepening shall be completed shall be three hundred fifty-five thousand (355,000). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. In addition, and notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee

Number of four hundred one thousand (401,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2009, or such lower Rent Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Rent Guarantee Number is hereinafter called "the 2009 Rent Guarantee Number"), shall not be increased and shall remain at the 2009 Rent Guarantee Number for purposes of the calculation of the Guaranteed Rental in the event that the Fifty Foot Deepening shall not have been completed by December 31, 2009. The calculation of the Guaranteed Rental shall be made based on the 2009 Rent Guarantee Number until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the 2009 Rent Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty Foot Deepening and shall reflect the Rent Guarantee Number next succeeding the 2009 Rent Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty Foot Deepening shall be completed shall be the Rent Guarantee Number next succeeding the 2009 Rent Guarantee Number. Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D.

Notwithstanding any provision to the contrary contained in this Section, (d) the Rent Guarantee Number of three hundred fifty-five thousand (355,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2005, shall not be increased and shall remain at three hundred fifty-five thousand (355,000) for purposes of the calculation of the Guaranteed Rental in the event that the Dredging, as defined in Section 8 (a) (3) hereof, shall not have been completed by December 31, 2005, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Guaranteed Rental shall be made based on the Rent Guarantee Number of three hundred fifty-five thousand (355,000) until such time as the Dredging is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the Rent Guarantee Number of three hundred fifty-five thousand (355,000) for any portion of the Terminal Throughput Year preceding the completion of the Dredging and shall reflect the Rent Guarantee Number of three hundred sixty thousand (360,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Dredging shall be completed shall be three hundred sixty thousand (360,000). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. In addition, and notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of four hundred six thousand (406,000), as set forth in Schedule D hereto for the Terminal Throughput

Year ending on December 31, 2010, or such lower Rent Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Rent Guarantee Number is hereinafter called "the 2010 Rent Guarantee Number"), shall not be increased and shall remain at the 2010 Rent Guarantee Number for purposes of the calculation of the Guaranteed Rental in the event that the Fifty-two Foot Dredging, as defined in Section 8(a)(5) hereof, shall not have been completed by December 31, 2010, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform Fifty-two Foot Dredging. The calculation of the Guaranteed Rental shall be made based on the 2010 Rent Guarantee Number until such time as the fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the 2010 Rent Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the Rent Guarantee Number next succeeding the 2010 Rent Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Rent Guarantee Number next succeeding the 2010 Rent Guarantee Number. Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. The postponement of the respective increase in the Rent Guarantee Number as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.

ADDENDUM B

(f) Notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred ten thousand (210,000), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2004, shall not be increased and shall remain at two hundred ten thousand (210,000) for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Forty-five Foot Deepening shall not have been completed by December 31, 2004. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the Terminal Guarantee Number of two hundred ten thousand (210,000) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the Terminal Guarantee Number of two hundred ten thousand (210,000) for any portion of the Terminal Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Terminal Guarantee Number of two hundred thirteen thousand (213,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Forty-five Foot Deepening shall be completed shall be two hundred thirteen thousand (213,000). Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. In addition, and notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred forty thousand six hundred (240,600), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2009, or such lower Terminal Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Terminal Guarantee Number is hereinafter called "the 2009 Terminal Guarantee Number"), shall not be increased and shall remain at the 2009 Terminal Guarantee Number for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Fifty Foot Deepening shall not have been completed by December 31, 2009. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the 2009 Terminal Guarantee Number until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the 2009 Terminal Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty Foot Deepening and shall reflect the Terminal Guarantee Number next succeeding the 2009 Terminal Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty Foot Deepening shall be completed shall be the

Terminal Guarantee Number next succeeding the 2009 Terminal Guarantee Number. Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E.

(g) Notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred thirteen thousand (213,000), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2005, shall not be increased and shall remain at two hundred thirteen thousand (213,000) for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Dredging, as defined in Section 8 (a) (3) hereof, shall not have been completed by December 31, 2005, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the Terminal Guarantee Number of two hundred thirteen thousand (213,000) until such time as the Dredging is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the Terminal Guarantee Number of two hundred thirteen thousand (213,000) for any portion of the Terminal Throughput Year preceding the completion of the Dredging and shall reflect the Terminal Guarantee Number of two hundred sixteen thousand (216,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Dredging shall be completed shall be two hundred sixteen Thereafter the Terminal Guarantee Number shall increase in the thousand (216,000). succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. In addition, and notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred forty-three thousand six hundred (243,600), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2010, or such lower Terminal Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Terminal Guarantee Number is hereinafter called "the 2010 Terminal Guarantee Number"), shall not be increased and shall remain at the 2010 Terminal Guarantee Number for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Fifty-two Foot Dredging, as defined in Section 8 (a) (5) hereof, shall not have been completed by December 31, 2010, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Fifty-two Foot Dredging. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the 2010 Terminal Guarantee Number until such time as the Fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the 2010 Terminal Guarantee Number for any portion of the

Terminal Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the Terminal Guarantee Number next succeeding the 2010 Terminal Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Terminal Guarantee Number next succeeding the 2010 Terminal Guarantee Number. Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. The postponement of the respective increase in the Terminal Guarantee Number as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.

ADDENDUM NO. 2 to

EXHIBIT I

to Lease No. L-PN-264

between

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

and

PORT NEWARK CONTAINER TERMINAL LLC

For the Port Anthority

Initialed:

For the Lessee

SUBSURFACE BASELINE REPORT FORMER NAPORANO IRON AND METAL COMPANY AND HUGH NEU SCHNITZER EAST FACILITIES

ADDENDUM NO. 2

to

EXHIBIT I

to

Lease No. L-PN-264

between

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

and

PORT NEWARK CONTAINER TERMINAL LLC

September 2002

SUBSURFACE BASELINE REPORT FORMER NAPORANO IRON AND METAL COMPANY AND HUGH NEU SCHNITZER EAST FACILITIES

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SECTION 1.0

INTRODUCTION

The purpose of this Subsurface Baseline Environmental Evaluation (SBEE) is to establish surface and subsurface baseline conditions for an approximately 15-acre parcel formerly occupied by the Naporano Iron and Metal Company (Naporano) and the Hugo Neu Schnitzer East (Hugo Neu). The location of the site is shown on Figure 1. The approximately 15-acre area is shown in Figure 2. The investigation on this portion of the property included the installation of 43 soil borings, five of which were completed as monitoring wells. A sixth monitoring well, MW-C5, was installed and sampled as part of the SBEE. However, MW-C5 was excavated during the remediation activities at the site. Soil analytical data for MW-C5 is not provided since the soil was excavated. However, since groundwater is not as location-specific as soil, analytical data for the groundwater samples collected from MW-C5 is included in this report. Locations of the soil borings and monitoring wells are shown on Figures 3 and 4.

The work performed as part of this investigation was conducted in accordance with *Technical Requirements for Site Remediation* (TRSR) (N.J.A.C 7:26E) and the New Jersey Department of Environmental Protection (NJDEP) *Field Sampling Procedures Manual*, May 1992.

SECTION 2.0

FIELD ACTIVITIES

A total of 43 borings were installed in order to characterize the site in regard to potential contaminants and provide information about the geology and hydrogeology. Thirty-three of these borings were installed by Port Authority personnel on both the former Naparano and Hugo Neu sites. Five of these borings were completed as monitoring wells. The remaining 10 borings were installed by Hugo Neus's consultant Excel Environmental Resources, Inc. (Excel) solely on the former Hugo Neu site. The locations of the soil borings and monitoring wells are presented in Figures 3 and 4. In general, the soil borings installed by Port Authority personnel were advanced until groundwater was observed in order to evaluate the potential for the presence and migration of hazardous substances or to delineate contamination seen in earlier investigative rounds. Soil borings installed by Excel were drilled and sampled at pre-determined depths. Additional information regarding sampling procedures is described below.

2.1 SOIL SAMPLING PROGRAM

The soil sampling program investigation followed the requirements specified in N.J.A.C. 7:26E-3.6. All borings performed by Port Authority personnel were installed utilizing either a bucket auger or a 4 5/8-inch inside diameter hollow-stem auger. In areas where subsurface features (utilities) were a concern or proposed sampling depths were limited, a bucket auger was used to penetrate surface features or collect the samples. After subsurface features were penetrated, continuous split-spoon soil samples were collected at 2-foot intervals using a carbon steel split-spoon. All soils were characterized by the on-site geologist (from the hand-auger samples and split-spoon cores) and screened using an HNu photoionization detector. Additionally, HNu readings were recorded in the breathing zone of the on-site workers, and headspace readings were recorded from soil samples collected from each discrete sampling interval. All information was recorded on boring log forms or in bound field logbooks.

Table 1 summarizes the soil sampling program, including sample ID, sampler, site, number of samples, depth, date, and analysis.

Ten of the borings, BH-N1, BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1, BH-N5A, BH-N5B, BH-N5C, BH-N5D, and MW-N2 were installed on the former Naporano Facility portion of the site. MW-N2 was completed as a monitoring well. All ten borings were installed on the Naporano facility by Port Authority personnel. A total of 24 soil samples were collected from the six borings. Two samples were collected from both BH-N1 and MW-N2 at depths 0.5 to 1.5 feet (ft) below ground surface (bgs) and between 4.0 and 5.0 ft bgs. Four samples were collected from BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1 from depths between 2.0 and 4.0 ft bgs. Samples from BH-N5A, BH-N5B, BH-N5C, and BH-N5D were collected form 0.5 to 2.5 ft. bgs.

The remaining 33 borings were installed on the former Hugo Neu portion of the facility. Port Authority personnel installed 23 of the borings on the Hugo Neu portion of the site and collected samples at various depths. The remaining 10 borings were installed by Excel. Excel collected a total of 28 soil samples. One to four samples were collected per boring by Excel. A detailed breakdown of the sampling program is presented in the sections below.

Due to logistical reasons, the soil and groundwater investigation at each of the former facilities were performed separately. Since the sampling approach for each facility was based on site-specific conditions, unique investigative methods (i.e., sampling depth and parameters) were utilized at each facility. The sampling methodology employed at each facility is presented in the sections below.

Summary of Investigation at Former Naporano Facility Portion of the Site

At the former Naporano Facility, 24 discrete soil samples were collected from ten soil borings for contract laboratory analysis in this portion of the site. Soil samples were collected from each boring at depths ranging from 0.5 to 5.0 ft bgs. HNu readings of the headspace from each sampling interval ranged from 0.0 to 1.5 parts per million (ppm). Field screening results along with the boring logs are provided as Appendix A. BH-N1 and MW-N2 were analyzed for total petroleum hydrocarbons (TPHC) and the complete list of priority pollutants with a forward library search (PP+40), including xylenes. A PP+40 scan is comprised of priority pollutant volatile organic compounds with a forward library search (VO+15) plus xylenes, priority pollutant base/neutral and acid extractable organics with a forward library search (BNA+25), polychlorinated biphenyls (PCBs), pesticides, and priority pollutant metals. Soil samples for Volatile Organic Compound (VOC) analysis were collected using methanol extraction methodology. Soil borings BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1, BH-N5A, BH-N5B, BH-N5C, and BH-N5D were analyzed for TPHC only. Trip blanks were submitted for laboratory analyses during the soil sampling task of this investigation. Field blanks and duplicate samples were not collected during the soil sampling phase of the investigation. All Quality Assurance/Quality Control (QA/QC) procedures are detailed in Section 2.3 of this report.

Former Hugo Neu Facility

Within the former Hugo Neu portion of the facility, Port Authority personnel installed 23 soil borings. Hollow stem auger drilling equipment was used to install seven soil borings in this portion of site. Continuous split spoon sampling was collected at intervals of 0.0 to 0.5 ft bgs and 1.5 to 2.0 ft bgs. Bucket augers were used to collect soil samples at the other four locations. Each sample was characterized by the on-site supervisor and screened using an HNu photoionization detector. All field screening information was recorded on boring log forms (see Appendix A).

For each soil boring there was anywhere from one to three samples taken from depths ranging from 0.5 ft bgs to 9.5 ft bgs (See Table 1). HNu readings of the headspace from each sampling interval ranged from 0.0 to 2.3 ppm. Field screening results along with the boring logs are provided as

Appendix A. Samples collected from BH-N6 and BH-N7 were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs), PCBs, Aldrin, Heptachlor, Dieldrin, Lead and TPHC analyses. Samples collected from MW-C1, MW-C2, MW-C3, and MW-C4 were analyzed for TPHC, Phenols, BNA+25, cyanide, PP+40, and PCBs. The remaining samples were only analyzed for TPHC.

As noted previously, in addition to the above-noted sampling, 10 additional soil borings were installed at the Hugo Neu site by Excel. These soil borings were advanced using Geoprobe drilling equipment. The boring locations are shown on Figure 3. A total of 25 discrete soil samples were collected for contract laboratory analysis. Two to four samples were collected from each soil boring location at varying depths ranging from 0.0 to 0.5 foot bgs to 7.0 –7.5 ft bgs. Each sampling sleeve was characterized by the on-site supervisor and screened using an HNu photoionization detector. All field screening information was recorded on boring log forms (see Appendix A). All soil samples were analyzed for VO+15, BNA+25, PCBs, and priority pollutant metals.

Soil samples were transferred immediately to laboratory-prepared sample containers, labeled, packed, and shipped for analysis in accordance with N.J.A.C. 7:26E 2.1. Soil samples were processed and labeled consistent with Section 2.3.3 of this document. Sample chain-of-custody forms (COCs) were prepared for all samples collected as part of this investigation. Sample documentation and COCs were prepared consistent with procedures detailed in Section 2.3.3. Each piece of sampling equipment was decontaminated prior to use at each new sample location and prior to sampling the respective soil strata. All sampling equipment was constructed of stainless steel. For additional information on equipment decontamination procedures, see Section 2.3.2.

Soil samples for volatile analysis were collected using methanol extraction methodology. Field blanks, trip blanks and duplicate samples were submitted for laboratory analyses during the soil sampling task of this investigation. Quality Assurance/Quality Control (QA/QC) procedures are detailed in Section 2.3 of this report.

Upon completion of each boring location, all soils and investigation-derived waste generated were handled consistent with the site-specific Waste Management Plan detailed in the site-specific investigation work plan.

2.2 GROUNDWATER SAMPLING PROGRAM

The groundwater investigation was conducted as per N.J.A.C. 7:26E-3.7. The program included the installation of six overburden on-site monitoring wells. The wells were installed in select boreholes created during the soil boring program. One of the wells (MW-N2) was installed on the former Naporano facility. Four wells (MW-C1, MW-C2, MW-C3, MW-C4) were installed on the former Hugo Neu facility. MW-C5 (its correlated boring was excavated during remedial activities) was also installed on the former Hugo Neu facility. Approximate locations of these wells are shown on Figure 3. Craig Drilling, Inc. (a New Jersey-licensed well driller) installed the monitoring wells. The well driller obtained the required NJDEP well permits. All the wells were installed under the supervision of Port Authority personnel. The monitoring well construction logs

are included in Appendix A.

2.2.1 Monitoring Well Installation

Well construction materials consisted of 2-inch-diameter (Former Naporano Facility) and 4-inch-diameter (Former Hugo Neu Facility), schedule 40 PVC, well screens and riser pipe. The monitoring wells were constructed with 0.020-inch (20 slot) well screens; location-specific geologic conditions dictated well screen length. The well screens ranged from 3.5 to 8 ft in length. Groundwater was encountered during the drilling activities at 3.5 to 7 ft bgs. The annular space between the well screen and the formation was filled with filter pack to an elevation approximately 2 ft above the top of the screen. The remaining filter pack consisted of approximately 1 foot of finer sand on top of the filter pack. This finer filter pack was designed to act as a sand choke between the formation material and the well materials, and to limit the potential for grout to enter the well from above.

A bentonite seal was emplaced above the filter pack to prevent infiltration to the cement grout into the filter pack and well screen. The seal thickness was dependent on the stratigraphy at each location and ranged from 0.5 to 1.0 foot.

A cement-bentonite grout mixture was placed above the seal and extended to ground surface. All wells were completed with flush-mount construction casings. Cement pads were constructed around each well to provide drainage away from the wells. Protective PVC caps were placed on the PVC riser pipe. Locks were placed on the outside of the protective casings. Metal tags with the monitoring well I.D. number and the NJDEP well permit number were affixed to the manhole covers. Each well was given a locking vacuum cap. A concrete pad was constructed and a flush-mounted manhole cover was grouted in place to secure these locations.

2.2.2 Well Development

Each monitoring well was developed in accordance with the TRSR. Monitoring well development was performed in order to meet the following objectives:

- Remove materials that may have accumulated in the openings of the well screen during installation, and key the well screen and filter pack into the formation being monitored.
- Remove fine materials from the sides of the borehole that resulted from drilling procedures.
- Stabilize the fine materials remaining in the vicinity of the well to retard their movement into the well, increasing well yield.

Provide an estimate of the well yield.

Monitoring well development was accomplished by overpumping the well using an appropriately sized pump. The pump was field-decontaminated, and new dedicated polyethylene tubing was used for each individual discharge line. To ensure that fine materials were removed during development, the pump intake was raised and lowered across the entire length of the well screen. Additionally, the pump was turned off and on and pumped at different rates during development to cause a surge effect to remove additional fine materials.

During development, field measurements of temperature, pH, specific conductivity, turbidity, and (at some locations) salinity were obtained at the beginning of development, during development and upon completion of development. Observations related to groundwater appearance were recorded.

The development procedures for the monitoring wells continued until the following goals were met or exceeded:

- Discharge became clear.
- Flow rate stabilized.
- At least five volumes of water were removed and the well pumped for a minimum of four hours.
- Turbidity readings were less than 50 NTUs as determined by a nephelometer.

2.2.3 Water Sampling Procedure Summary

Groundwater sampling occurred at the former Naporano Metals Facility on 21 September 1999 and at the former Hugo Neu Facility on 12 and 13 July 1999; all sampling was at least two weeks after development of the last well installed on site. During the groundwater sampling program at the former Hugo Neu site, monitoring well MW-C1 could not be located and therefore was not sampled. During the groundwater sampling program, all monitoring wells were purged and sampled according to low-flow protocol, using a field-decontaminated pump equipped with new, dedicated polyethylene and Teflon-lined discharge tubing. During purging, wells were pumped at a low rate (lower than the recharge rate) so that the drawdown was kept to the lowest possible amount. Water level measurements were taken to ensure that the water column was not purged to dryness.

Monitoring wells were purged until water quality parameters including temperature, pH, and specific conductivity stabilized (less a 10% variation) and turbidity levels were less than 50 NTUs. Purge rates for wells did not exceed the purge rates at which the monitoring wells were

developed. During well purging, groundwater was monitored for the presence of VOCs. Additional groundwater quality parameters including Eh (millivolts), salinity, and dissolved oxygen were obtained to provide additional water quality data. The groundwater sampling procedure employed during the sampling event is provided below.

- 1. Measure static water level in monitoring well using an electronic water level device to minimize disturbance to the water column.
- 2. Check for free product or sheen floating on water surface in the well.
- 3. Position low-flow pump in the water column with the intake placed at a point between the middle and top of the screened interval.
- 4. Purge the well using a low flow rate (<0.5 l/min) until indicator parameters (i.e., pH, conductivity, oxygen, etc.) have stabilized (Note: Goal during purging is to limit drawdown to < 0.1 m).
- 5. Collect groundwater samples using same flow rates as established during purging.
- 6. Fill sample bottles directly from the pump discharge avoiding excessive agitation of sample. Fill Volatile Organic Analysis (VOA) sample vials first, then remaining sample bottles.
- 7. Decontaminate pumps used for groundwater sampling prior to use according to the procedures described herein. One sample was collected from each monitoring well. All samples were separate grab samples.

Each water sample at the Former Naporano Facility was analyzed for TPHC, PP+40, VOCs + 15, total dissolved solids and total chlorides. Each water sample at the Former Hugo Neu Facility was analyzed for TPHC, PP+40, total suspended solids and total chlorides. Temperature, pH, and specific conductivity were measured in the field at both facilities. Groundwater COCs and labeling procedures are detailed in Section 2.3.3.

2.3 QUALITY ASSURANCE AND QUALITY CONTROL

In order to generate analytical data of known and defensible standards, quality assurance (QA) and quality control (QC) protocols for sampling and laboratory analysis were complied with in accordance with the requirements specified in N.J.A.C. 7:26E-2.1. This was conducted to ensure that samples obtained in the field were representative of the particular environment from which they were collected and were of satisfactory quality to meet the project objectives.

2.3.1 QA/QC Samples

2.3.1.1 Field Blanks

A field blank composite sample was taken during the groundwater sampling portion of the investigation. A field blank was conducted using two identical sets of cleaned sample containers. One set of containers was empty and served as the sample containers to be analyzed. The second

set of containers was filled with laboratory-demonstrated analyte-free water. At the field location, the analyte-free water was poured over the clean sample equipment (pump) and placed in the empty sample containers for analysis. The field blank was handled, transported, and analyzed in the same manner as samples acquired that day. The field blank was performed at the rate of one per sampling day per type of sampling equipment, and packaged with its associated matrix. The field blank for groundwater was analyzed for all of the same parameters as the samples collected that day.

2.3.1.2 Trip Blanks

Trip blanks are required only for aqueous sampling events for volatile organics and for soil samples collected with the methanol preservation method. Sample bottles for aqueous trip blanks were filled at the laboratory with laboratory-demonstrated analyte-free water. Sample bottles for trip blanks associated with the volatile soil samples collected using the methanol preservation method were filled and weighed at the laboratory with pesticide-grade methanol. The trip blanks traveled with the sample bottles and were not opened in the field. They were handled, transported, and analyzed along with the other samples. For aqueous samples, one trip blank was provided per shipment or two-day sampling event. For soil samples collected using the methanol preservation method, one trip blank accompanied each sample shipment.

2.3.2 EQUIPMENT DECONTAMINATION

2.3.2.1 Sampling Equipment Decontamination

All soil and groundwater sampling equipment, except heavy machinery and submersible pumps, were decontaminated using these procedures.

Soil sampling equipment was decontaminated according to the following procedure:

- 1. Non-phosphate detergent plus tap water wash.
- 2. Tap water rinse.
- 3. Distilled/deionized water rinse.

Groundwater sampling equipment was decontaminated and packaged in the laboratory, and dedicated for exclusive use at one sample location only. The laboratory utilized the following decontamination procedure:

- 1. Non-phosphate detergent plus tap water wash.
- 2. Tap water rinse.
- 3. Distilled/deionized water rinse.
- 4. 10% nitric acid solution rinse.
- 5. Distilled/deionized water rinse.
- 6. Methanol (pesticide-grade) rinse.*
- 7. Total air dry.

- 8. Distilled/deionized water rinse.
- * Methanol was used in place of acetone since acetone was a target analyte.

All decontaminated sampling equipment was stored and handled as appropriate to prevent contamination. Information concerning the decontamination methodology, date, time, and personnel was recorded in the field logbook.

2.3.2.2 Heavy Machinery Decontamination

Prior to use on site, heavy equipment was steam cleaned or manually washed. Parts that were prone to contact with contaminated materials required more frequent cleaning to prevent cross-contamination of environmental samples. For example, augers and split-spoon sampling devices were steam cleaned between sampling locations.

2.3.2.3 Pump Decontamination

The pump used for evacuation of water from monitoring wells prior to sample collection was decontaminated to eliminate the possibility of contamination introduced by pump insertion.

The pump was cleaned and flushed between use at each monitoring well. The outside of the pump was manually washed using non-phosphate detergent and water, followed by a potable (tap) water rinse. The pump was then flushed with 20 gallons of potable water pumped through the housing and hose. After completion of the flushing, the exterior housing was rinsed with distilled and deionized water. Rinsate from the pump decontamination was collected in drums for disposal. After each use, the hose was cut up into manageable-sized pieces and disposed of with other investigation-derived wastes.

2.3.2.4 Monitor Well Casing and Screen Decontamination

Before installation, well casings and screens were manually scrubbed in the field to remove foreign material. Casings and screens were also thoroughly steam cleaned to remove all traces of oil and grease which may have been present, especially at threaded joints. Casings were carefully handled and stored to prevent cross-contamination prior to installation.

2.3.3 SAMPLE DOCUMENTATION

During sampling, all activities were recorded in a logbook to provide an accurate record of the sampling event and the procedures followed. Entries made by sampling personnel in the logbook included:

- Date/Time/Weather
- Sampler/Geologist/Soil Scientists' Names

- Sample Point Identification (including location, matrix, and sample depth)
- Sketch Showing the Sampling Point Location (including reference distances)
- Soil Profile
- Sample Size
- Sampling Equipment Used
- Field Measures (where appropriate)
- General Comments (e.g., odor, staining, etc.)

The field crew also labeled each sample container with the appropriate information necessary to identify the sample as listed below:

- Unique Sample Identification Number
- Date
- Time of Sampling
- Name
- Preservation
- Analyses
- Sampler's Initials

This information was then supplemented and cross-referenced on a COC form, providing documentation of the handling of each sample from collection to arrival at the laboratory.

The COC was completed by the field crew and signed by the sampler and all personnel handling the samples before the samples were relinquished to the laboratory. The COC contained the following information:

- Project Name
- Date
- Sampler's Initials
- Sample Identification Number
- Name/Description of Sample (Analytical Parameters)
- Preservation
- Number of Containers
- Holding Conditions and Locations
- Signature of all Handlers and Date and Time of Transfers
- Organization or Affiliation of all Handlers and Reason for Transfer

All samples were preserved at the time of collection and packaged in coolers of sufficient size to hold all containers, ice, and packing material to prevent breakage. Coolers were of suitable type and integrity to transport the samples.

At the laboratory, receipt of samples was recorded on the COC form by laboratory personnel. The original or a copy of the form was returned to the shipper. The COC record was checked by laboratory personnel against the information regarding the analysis requested. If any discrepancies

were discovered, they were resolved with the person requesting the analysis and recorded to provide a permanent record of the event. A record of the information detailing the handling of a particular sample through each stage of analysis was provided by completing a laboratory chronicle form. This form typically provides the following information:

- Job Reference
- Sample Matrix
- Sample Number
- Date Sampled
- Date and Time Received by Laboratory
- Holding Conditions
- Analytical Parameter
- Extraction Date/Time and Extractor's Initials
- Analysis Date/Time and Analyst's Initials
- QA Batch Number, Date Reviewed, and Reviewer's Initials

2.3.4 LABORATORY ANALYTICAL QUALITY ASSURANCE PROCEDURES

Analyses of samples were performed in accordance with NJDEP and U.S. Environmental Protection Agency (USEPA) methodologies.

The contract laboratory provided sample containers for the requested analyses appropriate for analysis of each matrix. The sample containers were of sufficient size to permit replicate analyses to be run from the sample matrix. All unused portions of samples will be archived by the laboratory until written notification from the Port Authority regarding their disposition is received. The contract laboratory will also retain samples and sample extracts in a sample archive for future analyses if requested by Port Authority representatives.

Calibration and periodic inspection of laboratory instruments was in accordance with USEPA and/or the manufacturer's specifications. Reference standards and QC samples (spikes, blanks, and duplicates) were used as necessary to determine the accuracy and precision of procedures, instruments, and operators. If QC sample analysis results indicated QC values outside the control limit range, sample analysis was suspended until the instrument was recalibrated. In general, the following quality control requirements applied to all samples:

- Analysis of an appropriate blank with every set.
- Analysis of at least one standard at midrange concentration (preferably an additional standard near the detection level).
- Annual analysis of external reference samples.
- Annual analysis of split or double blind each method and parameter.
- Laboratories must keep records of the following samples.
- Determination of a detection limit for information:
 - Date, title, analytical method name, and reference
 - Time of analysis
 - Details of methods not specified in referenced procedures, sample numbers

- All raw data (measurements)
- Calculations
- Results
- Equipment used, and instrumental parameters
- Analyst signature or initials.

QC data was reported with the analytical results. The laboratory provided as a final report reduced-data deliverables as per N.J.A.C 7:26E, Appendix A, Sections III and IV.

2.4 WASTE MANAGEMENT

Types of waste material generated during the site investigation included soil drilling cuttings, monitoring well development groundwater, decontamination rinsates, expendable materials, and personal protective equipment (e.g., gloves, towels, etc.).

Soil cuttings from borings and holes converted to monitoring wells were inspected for contamination by field observation (visual and odor) and instruments (HNu meter). When the material was not contaminated based on field observations, the facility environmental coordinator located an area at the work site to reuse the material as backfill. The material may have been used on site in areas outside the work area, providing the area had similar subsurface characteristics or results of the soil analysis are below the residential cleanup criteria. This determination was the responsibility of the facility environmental coordinator. Material that could not be reused on site was properly disposed of off site utilizing the Port Facility Call-in Disposal Contractor.

Prior to pumping water from a monitoring well, a sample was obtained using a clear-bottom Teflon bailer. The water sample was inspected for contamination by observation (visual and odor), HNu measurements, and field tests (pH). If the water was not contaminated based on the field inspection, the water was reapplied to the ground surface in a manner not to allow water to run off site or over stained areas.

SECTION 3.0

SURVEYING

Table B-1 of Appendix B provides the final latitude, longitude and elevation to the nearest 0.01 foot of all borings and wells installed by Port Authority personnel. The data is presented in North American Datum (NAD) 83 format. The elevation for all monitoring wells is measured from the top of the well casing. The elevation for all soil borings is measured from ground surface. Survey data was not collected for borings installed by Excel. The locations presented in Table B-2 of Appendix B and Figure 3 were scaled off from the figure provided by Excel in their March 1999 Report (Figure 3 - Proposed Soil Boring Locations, Preliminary Assessment Report and Site Investigation Work Scope Technical Report and Appendices, Excel Environmental Resources, Inc., March 1999).

SECTION 4.0

RESULTS

4.1 SOIL SAMPLING RESULTS

The analytical results of the soil samples and associated trip blanks collected by Port Authority and Excel. personnel at the Former Naporano and Hugo Neu Facilities are contained in Tables 2 through 12.

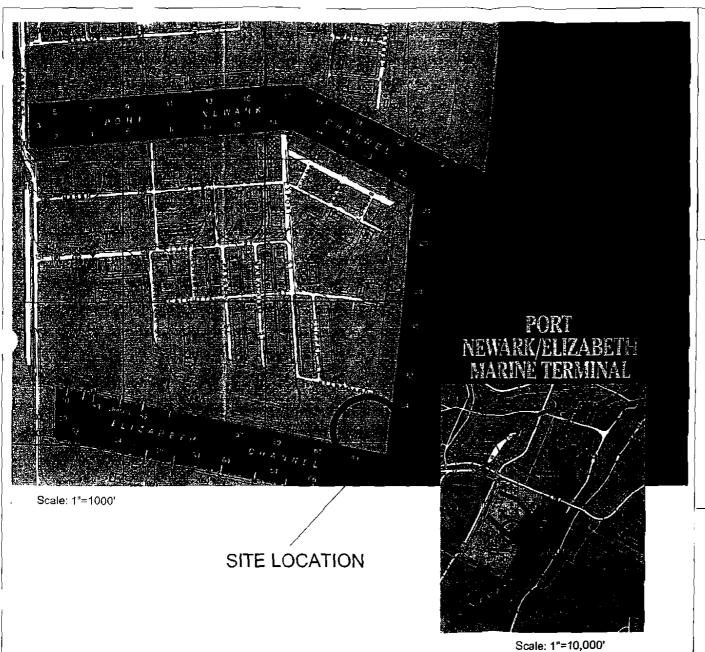
- Table 2 summarizes results of VOC analyses performed on the soil samples collected by the Port Authority.
- Table 3 summarizes results of SVOC analyses performed on the soil samples collected by the Port Authority.
- Table 4 summarizes results of PCBs analyses performed on the soil samples collected by the Port Authority.
- Table 5 summarizes results of pesticide analyses performed on the soil samples collected by the Port Authority.
- Table 6 summarizes results of inorganic analyses performed on the soil samples collected by the Port Authority.
- Table 7 summarizes results of TPHC analyses performed on the soil samples collected by the Port Authority.
- Table 8 summarizes results of VOC analyses performed on the soil samples collected by Excel.
- Table 9 summarizes results of SVOC analyses performed on the soil samples collected by Excel.
- Table 10 summarizes results of PCBs analyses performed on the soil samples collected by Excel.
- Table 11 summarizes results of inorganic analyses performed on the soil samples collected by Excel.
- Table 12 summarizes results of THPC analyses performed on the soil samples collected by Excel.

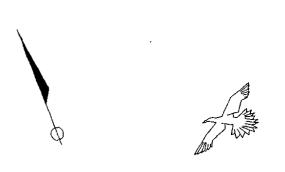
4.2 GROUNDWATER SAMPLING RESULTS

The analytical results of the groundwater samples collected by the Port Authority personnel from the monitoring wells located at the former Naporano and Hugo Neu Facilities are contained in Tables 13-17.

- Table 13 summarizes the VOC analyses performed on the groundwater samples.
- Table 14 summarizes the results of the SVOC analyses performed on groundwater samples.
- Table 15 summarizes the PCB and pesticide analyses performed on the groundwater samples.
- Table 16 summarizes the inorganic analyses performed on the groundwater samples.
- Table 17 summarizes the results of the TPHC analyses performed on the groundwater samples.

FIGURES





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Figure 1

SITE LOCATION MAP

Source Map: Port Authority of New York and New Jersey Map of Port Facilities

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Engineering Department Construction Division Materials Engineering Section

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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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THE POR AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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ROJECT:	PN	METER	, meta	15			
JRING N	0	B-Z			DATE:	6-24-99 Um, RAE	
TELD REA	Dings by: y	M. OUDE	H		PID Model: 1	din, RAE	
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THE PC AUTHORITY OF N. 3 N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

			Sheet > of >
OJECT: PN metro V	notals		
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THE PORTAUTHORITY OF MYS MJ

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

			SHEET / OF 3
PN METRO METALS EPI	RACTOR	SOFING NO.	SURFACE ELEV.
ATION . A L L C C		CONTRACT NO.	DATE
Laid out by Consultant		426-99-006	6-23-99
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THE POI AUTHORITY OF N.Y. N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet Z of 3

ROJECT:	PN	metro	met	415		
ORING No						DATE: 6/3/99
ELD REAC	HNGS BY:	m. Oude	<u> </u>		PID	Model: MINI RAE
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THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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ROJECT:	PN	met	ro Me	stals				,		
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THE PORT AUTHORITY OF MY & MU

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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THE POF AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

ROJECT:	<i>PJ</i>	METRO A	letals		
RING No	· 584				DATE: 6-24-99
ELD READ	NINGS BY: MY	1. OUDEH			MD Model: Mini RAE
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	REMARKS
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	7.5 - 8.0		0	$\overline{}$	
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THE PO AUTHORITY OF N. \ N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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OJECT: PJ METRO METALS			
OCATION: Land out by Consultant		DATE: 6.24-99	
IRING No: 5B4-A	TOTAL No. OF SAM		
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THE PORTAUTHORITY OF MY & MY

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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M. OUDEH / R. HARDWOOD									
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THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet Z of 3

WNG No	<u>5</u> B	4-B			DATE: 6-24-99
		1. OUDEH			PID Model: Mini RAE
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	REMARKS
Am	0-0.5		3.4	0	
_	05-1.0		8.6	(
	1.0 - 1.5	_	3.0		
	15-7.0		3.4		
	20-7.5		4.2		
	25-30		30.5		
	3,0 - 3.5		18.9		
	3.5-40		9.5		·
	40-4.5		2.8		
	45-5.0		2.8	· .	_
	50-55		7.8		
	5.5-60		3,3		
	60-6.5	_	7.6		
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	7.0 - 7.5		3,5		
	7.5-8.0		2.2	\\ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
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		: Agreement	No.: 20113	2-005 Effec	tive Date: Monday, June 19, 2006

THE PO AUTHORITY OF N. & N.J.

		Sheet 3 of 3
IOJECT: PN METER META	us_	
OCATION: Laid out by Consulta	int	DATE: 6-24-99
IRING No: SBH-B	TOTAL No.	OF SAMPLES: Z
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THE PORT AUTHORITY OF MY & MU

Engineering Department
Construction Division
Materials Engineering Section
BORING REPORT

NAME OF CONTRACTOR BORING NO. VECT SB 5-A SITE METRO METALS SPI CONTRACT NO. DATE the consultant as per drawing 426-49-006 10-23-99 CASING SIZE HOLE TYPE GROUND WATER LEVEL Remarks Date Time Depth 40.D. "LD. HAMMEN TO SE (1) EX らせて toung # FALL Brian EXCL CONSULTAR OUDER SPOON BLOWS/6" RE-COY'D SAMPLE DESCRIPTION AND REMARKS SAMP. WEAFT LINE LOCATES CHANGE OF PROFILE DEPTH HO. 6 48" ONAM br M.F. Sand, tr grand ti tr. Shell 48" 8.0 Bottom of Boring 141C070 0'-05' # CO77 2.5'-3.0' #C166 6.5'-7'

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

THE POF AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

PID READINGS Sheet Z of } ROJECT: PJ METRO METALS SITY DATE: 6-23-99 SB-5A **WING No.** TELO READINGS BY: PID Model: Min . IN-SITU BREATHING HEAD-SAMPLE Split Spoon Space Zone REMARKS TIME Reading Reading No. Reading Am

THE POM AUTHORITY OF N.Y N.J.

		She	et 3 of 3
DJECT: PN Metro Metal	5 51TE		
CATION: Land out in the field by	12 1	DATE: 6-23-99	
RING No: 585-A	TOTAL No. OF SAM	. 1	
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SENT AT SAMPLING			531014551112411414141414141414141414
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# CO77 2.5'	-3.0'		
# CO77 2.5'. # C166 6.5'	- 7.0'		
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THE PORT AUTHORITY OF MY & MU

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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MECT				·-	NAME OF CONT	_	10	BORING NO.	SURFACE ELEV.
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OK	Laia	CASHIG S	EDA HOLE	TYPE	ut as par	owe.		MO WATER LEVEL_	6-23-49
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THE POR AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

NG No		5-B	- []		b- 23-17
READ	INGS BY:	M. OUDE	EH		PID Model: Hin PAE
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THE PC T AUTHORITY OF N. . & N.J.

	····		Sheet 3 of 3
ROJECT: PN METRO	METALS		
OCATION: Laid out by Consult	fant as pr Dual	DATE: 6- 31	,_99
DRING No: 5B5-B	TOTAL No. OF SAN		
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LINQUISHED	DATE	RECEIVED	
SIGN)	TIME	BY (SIGN)	
NOUISHED	DATE	RECEIVED	
	TIME	BY LAB	
,	in 3	one pt. JA	ms
ARKS: 3 Samples taken and bottle # C17	1 0'-0.5'		
# C135	7'-7.5'		
# C133	7'.7.5"		
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THE PORT AUTHORITY OF MY & MU

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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MECT,				, ,	NAME OF CONT			BORING NO.	SURFACE ELEV.
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CATION							,	CONTRACT NO.	DATE
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i scror	, h/	R. HARDO	ood						
	/	SPOOH	RE-	SAMP.			MPLE DESC	CRIPTION AND REMARK	<u>(6</u>
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THE POR. AUTHORITY OF N.Y ... N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

RING No		<u> </u>			DATE:	6-23-99
D READ	MINGS BY:	1. OU DEH			PID Model:	MINI RAE
ME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading		REMARKS
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_	1'-2		0	0		
	2'-3		D	0		
	3'-4		. 2	0		
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	FMC					onday, June 19, 2006 r, May 22, 2018

THE PO AUTHORITY OF N.Y N.J.

		Sheet	Oof 3
OJECT: PJ METAU 1	METALS SITE		
CATION: Laid out by &	Consultant	DATE: 6-23-99	
RING No: 3B 5-8	TOTAL No. O	F SAMPLES: 2	
NATURE OF ALL		2dl	
SENT AT SAMPLING			
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IGN)	TIME	BY (SIGN)	
INQUISHED	DATE	RECEIVED	
4GN)	TIME	BY (SIGN)	cessionessa en en en en en en en
'IQUISHED	DATE	RECEIVED	
31 0	TIME	BY LAB	_
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and Bottle #1	40 2-2.5°		·
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THE PORTAUTHORITY OF MY & MU

Engineering Department Construction Division Materials Engineering Section BORING REPORT

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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of

JECT:			Fals 5	112 C	In the state
MG No.		2 140	<u> </u>		PID Model: Mini PAT.
D READ	INGS BY:	2. HARDA	IOV A		PID Model: Mini PAT.
IME_	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	REMARKS
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	15-20		0.1		·
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	2,5-3,0		0_		
	3,0-3,5		0.2		
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THE PO AUTHORITY OF N.1 N.J.

			Sheet 3 of 3
OJECT: PN meti	o Metals 517	e C	
CATION: Laid out be	v Consultant	DATE: 6-2	5-99
RING No: SB5D	TOTAL No. OF	SAMPLES: 3	
VATURE OF ALL '	2	2-10	Í
SENT AT SAMPLING			446888888888888888888888888888888888888
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NOUISHED	DATE	RECEIVED	_
XGN)	TIME	BY (SIGN)	54445000000000000000000000000000000000
1QUISHED	DATE	RECEIVED	· 20 c
	TIME	BY LAB	
LAKS: 3 Sample	s taken 1	u 3 J.	4n S
and bottle	e #Cary	0'-0.5'	<u> </u>
· · · · · · · · · · · · · · · · · · ·	# C214	1.5'-2'	
	#C215	3,5'-4'	
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THE PORTAUTHORITY OF MY & MJ

Engineering Department Construction Division Materials Engineering Section

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BORING REPORT

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* C	2 1	CASING &	EZE HOLE	TYPE		ROUND WATER LEVEL	
OK	<u>sorobr</u>	~LD. .			Date Time Dept		lemarics
·	FALL _		FALL	_	623 12° Pm 9'	found in	543
E R	Ba	LIAN K	0/20	7			
CTON UDE	1/_60	HARDWG	T				
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	0	MACRO			1 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	ogenait, Sand.	
				_	Misc. fill dk-brown off	send, lush of fock	Aptal, 91011 1.0'
			\	1	Misc Fill dk-brows		
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_	₹ 3 ₹		<u> </u>	1	stregements, gla	ss paphalt	weganants
- ′				_	till grey mit Gand	1. 41 glavel, +1. 4	-1t- 40
		MACRO			His fill of k- grey - black	m. F Sand, Silt	would frequent
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	- 9 -	MAGO		1	Same		
	77	1 7					9.5'
	-		148]]]	Fill red by M.F. Sand,	tr. gravel, tr.	2/1- 10.0
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							11.5"
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	 -'´-		<u> </u>	-		Botton	d boing I
	- -			1	Soud 05 61.0 \$1	1167 6-65	#C168
]	4 25' to 30' #	-	
					,		
	- /SNOT	ES: 1 — Length	necovered:	0" 10	es of Samole T Tran used		

1 — Length recovered; 0° — Loss of Sample, T — Trap used
FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006
Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

Sheet 2 of 3

THE PORT A THORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

metro metals 6-23-99 DATE: G No. PID Model: Mini MIDUDEL **READINGS BY:** HEAD-IN-SITU BREATHING Space REMARKS SAMPLE Split Spoon Zone Reading Reading Reading ΙE No. 0 0 0 0 0 0 0 Ō 0

THE PO AUTHORITY OF N.Y N.J.

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			Sheet 3 of 3
DJECT: PN Metro M.	otals SiTe		
CATION: Laid out by the Gazell	autas par diawing	DATE: 6.23.	-9.7
RING No: 5B 5-E	TOTAL No. OF SAL	2 1	
MATURE OF ALL `	Tage /	L	
FSENT AT SAMPLING			
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(\$	TIME	8Y LAB	
LARKS: Took 4 Samples	in Hone	pt. JAns a	n L
the following Toos	Bottles	<u>.</u>	
Buttle # 467 0.5'			
# C169 2.5'	- 3.0'		
# C168 b' # C170 9.5'	- 10'		_
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THE PORT AUTHORITY OF MY & RU

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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ATION		aid 6	Carteria	,	1			CONTRACT NO.	DATE -25-99
	uia c	Jan By	CONSUJ-	1au	<u> </u>			426-99-006	7
			SIZE NOLE ITE		Date	Time		OUND WATER LEVEL	Remarks
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4	FALL GE	Roy 4	# FALL						
_ER				7					
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CTOR	12. 4	AND COM	> (Excer	K	1		1	- [-
DING	1	SPOON	RE- SAM		_1	104	NO E DE	SCRIPTION AND REMAI	aks
**************************************	DEPTH	BLOWS/6"	COV D NO.					TES CHANGE OF PROF	
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THE PORTAUTHORITY OF MYBRID

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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Determined The Copts Remarks Sefery HAMMER TO OSICY FILL O OSICY O OSI	0,0
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BOOM DROWS SPOON RE- SAMP. SAMPLE DESCRIPTION AND REMARKS TT. DEPTH BLOWSA COVD NO. LINE LOCATES CHANGE OF PROFILE Hand Full Filt M-F Gray Sand TYSIT, Tr Gray Same 2 Same 3-2 32" 4" Black Gray organic SITY Yay Buttom of Boring 10 3.5 SCREEN 2 8' 4'-12' 3 5' 4'-1 4 6' 3'-9' BII Samples chacked with PIN Mata, 5 12 Samples chacked with PIN Mata, 5 12 Samples chacked with PIN Mata, 5 14 5 5 5 5 5 5 5 5 6 5 5 5 5 5 5 5 5 5 5	2,0
BOOM DROWS SPOON RE- SAMP. SAMPLE DESCRIPTION AND REMARKS TT. DEPTH BLOWSA COVD NO. LINE LOCATES CHANGE OF PROFILE Hand Full Filt M-F Gray Sand TYSIT, Tr Gray Same 2 Same 3-2 32" 4" Black Gray organic SITY Yay Buttom of Boring 10 3.5 SCREEN 2 8' 4'-12' 3 5' 4'-1 4 6' 3'-9' BII Samples chacked with PIN Mata, 5 12 Samples chacked with PIN Mata, 5 12 Samples chacked with PIN Mata, 5 14 5 5 5 5 5 5 5 5 6 5 5 5 5 5 5 5 5 5 5	7.0
SPOON RE- SAMP. SAMP. SAMP. SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROPILE Hand Fill	0.0
Hend Full Mischill-sand, Silt, Math, wood, Etc. Bugar Fill-M-F Gray Sand, Trsilt, trGravy/ Same	
Same	
Same 2 Same 3 - 2 72' 4 B Black Gray crypanic SIPTY (Yey) SUM WITHOUT WILL'S.S 10 3.5' SCREEN 2 8' 4'-12' 3 5' 4'-1 4 6' 3'-9' DI Samples Checked WITH PIN MATA, 5#1 5-2' SP 2-25' SW1/9	
Same 2 Same 3 - 2 72' 4 B Black Gray crypanic SIPTY (Yey) SUM WITHOUT WILL'S.S 10 3.5' SCREEN 2 8' 4'-12' 3 5' 4'-1 4 6' 3'-9' DI Samples Checked WITH PIN MATA, 5#1 5-2' SP 2-25' SW1/9	
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3-2 72' Black Gry organic SITY (Year) SIAN INTERNAL HILLSS' 10 3.5' SCREEN 2 8' 4'-12' 3 5' 4'-12' 4 6' 3'-9' HI Samples checked with PIN Matry	
2-3 3-2 32' 4's Black Gray organic SIPY Yay Buttonnof Boring 10 3.5' SCREEN 2 8' 4'-12' 3 5' 4'-1 4' 3'-9' B1 Samples checked with PIN Mater, Str. 50' 50' 50' 50' 50' 50' 50' 50' 50' 50'	
3-2 32' 4 Black GRY OYSONIC SITY (Yay SIM INTERIOR 612'5.5 10 3.5' SCREEN 2 8' 4'-12' 3 5' 4'-1 4 6' 3'-9' BH Samples Checked WITH PIN MATA, 5# 5-3' S# 5-3' S# 2-3-5' S# 12-3-5' S	
Bottom of Boring 10 3.5' SCREEN 2 8' 4'-12' 3 5' 4'-1 4' 3'-9' PH Samples Checked with PIN Matar	62
Bottom of Boring 10 3.5' SCREEN 2 8' 4'-12' 3 5' 4'-1 4' 3'-9' PH Samples Checked with PIN Matar	7.0
10 3.5 ' SCREEN 2 8' 4'-12' 3 5' 4'-1 4 6' 3'-9' #H Samples checked with PIN Mater	
10 3.5 ' SCREEN 2 8' 4'-12' 3 5' 4'-1 4 6' 3'-9' #H Samples checked with PIN Mater	/ -
10 3.5 ' SCREEN 2 8' 4'-12' 3 5' 4'-1 4 6' 3'-9' #H Samples checked with PIN Mater 5#1 5=2' 5#1 2=5' 5 1/2	
3 5' 4'-12' 3 5' 4'-1 3 6' 3'-9' #H Samples checked with PIN Mater	
3 5' 4'-1 - 1 6' 3'-9' <u>All Samples checked with PID Mater</u>	.
- 9 6' 3'-9' By Samples Checked with PID Mater,	
- 9 6' 3'-9' By Samples Checked with PID Mater,	
- 1 6' 3'-9' Bill Samples Checked with PIN Mater,	
(#/ cis') (#0 size c /a	
$\mathbb{L}_{\mathcal{A}}$	n
TesTing Remaining Samples Piscarole	
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LI H 15 1 0 HI SEL CONT	
1/1/1 Agrol 30/ 180 VIA 3 / CO/S	
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Methand Sol Bottle Styl C075	,

RT AUTHORITY OF NY & NJ

ring Department - Materials Division

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95 Laid Out in	field as por	Drawing .	•	Chair
1w-c/	BY MONTON	ASPECTOR DXOWO	Orace Osciety	DATE 6/23/59
¹ Development R	eport (NOTE: WATER L	EVEL READINGS FROM TOP OF PVC)		
6-24-99 WATER	LEVEL BEFORE 3.5	WATER LEVEL AFTER	TAKEN	MHUTES AFTER
	7° dia. Manhole cover /C pipe w/ locking cap			
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	L3	Signal Si	Boltom of well	
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Boring diameter

Cap-

THE POR AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

			*	710	ncaumaa		Sheet	3	of Y
ROJE	CT:	PN- MA	Tre Motals	5.76			***************************************		
SRIN	G No	. Mu	U-C1			DATE:	6/23/89		
	····	INGS BY:	OHowe			PID Model:	6/23/99 Mu RAG		
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ENGINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

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			Sheet 7 of 9	
OJECT: PN- MoTre Metals	SiTe			
OCATION: As Land out in Field	95 Por Prawing	DATE: 6/231	<u></u>	
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THE PORT AUTHORITY OF MY & MY

Engineering Department Construction Division Laterials Engineering Section

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ngirieering Department - Materials Division

i, allation Report		Sheet 2 of Y
PN- MeTro MeTals SIT		CONTRACT NO. 436-99-006 CONTRACTOR
As Landoutin field as f	Por Procine	Craig
NW-C2 WELLTIME MO	witor Office	DOSUCH DATE 6/22/99
ell Development Report (**)	TE: WATER LEVEL READINGS FROM TOP OF PVC	
	6.7 WATER LEVEL AFTER 6.9	TAREN MAUTES AFTER
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L3	openings	

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Cap-

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Boring diameter

12.0' Bollom of well

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THE POR AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 3 of 4

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)RIN	IG No.	Mu	1- (2	DATE:	6/22/99 Mu RAE		
		INGS BY:	etro Meto 1-CZ Odowe			PID Model:	MILL RAE
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	·	<u> </u>	Sheet 4 of 4
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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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NOTES FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

IRT AUTHORITY OF NY & NJ

ring Department - Materials Division

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Ashard out in fine	Monitor	MISPECTOR HOLDE	POSCO	JOATE , ,
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$L1 = \frac{0.3}{3.7}$ $L2 = \frac{3.7}{5.0}$	£2	2	,	ntonite seal gravel liller
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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 3 of 4 SIJO PN-iNoTro Metab ROJECT: -c3 MW XXING No. DATE: Oxove **IELD READINGS BY:** PID Model: IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space REMARKS Zone TIME Reading No. Reading Reading 1.7 0.0 96 0.0 54 0.0 50 00 FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006-

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THE PORT AUTHORITY OF N.Y & N.J.

<u> </u>			Sheet Y of Y
DJECT: PN- MOTO MOTO S	Te		
CATION: By Laid OUT IN Fuldon	la Drawin	DATE: 6/23/	77
DRING No: MW-C3	TOTAL No. OF SAL		
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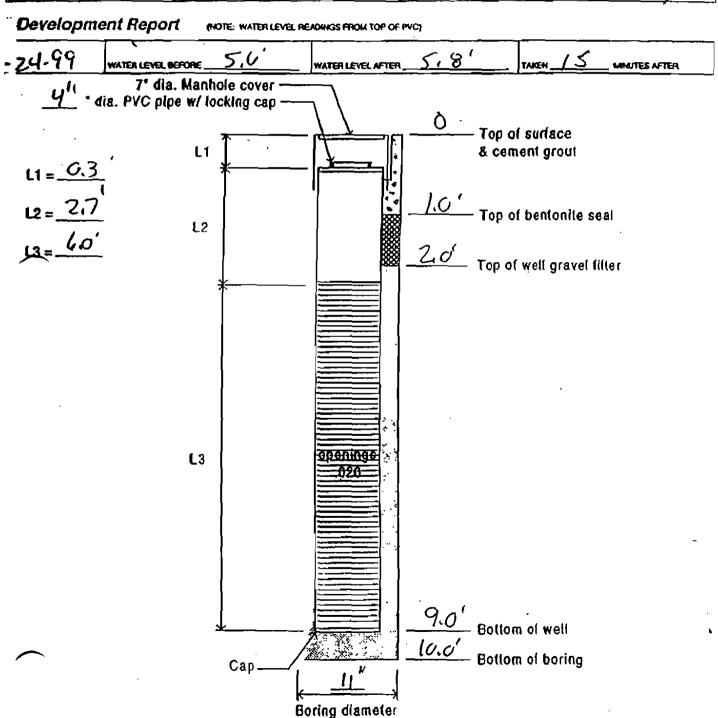
Engineering Department
Construction Division
Materials Engineering Section
BORING REPORT

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NOTES FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

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Installation	Report			Sheet 2014
N- NaTre	. NoTals Site			00HTRACT NO. 426-99-006
	in field as por Drod	Wint	_ ,	CIP1 &
NW-cy	WELLTIME MONIJOF	MSPECTOR DHowe	ORILLER OSLOG	G/23/99



THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

3 014 Sheet PN -MOTIO MOTES SITE JECT: 6/23/99 MW-CY DATE: "ING No. Odbwe MINI RAS PID Model: 19 READINGS BY: IN-SITU BREATHING HEAD-SAMPLE Split Spoon Space Zone **REMARKS** Reading Reading Reading IME No. L1 PM 1.0 0.1 00 53 000 5B 00

> FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

THE POL AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 4 of 4 Motro Motak Site DJECT: and OUTIN Field 93 per Braning CATION: DATE: ... RING No: TOTAL No. OF SAMPLES: **LATURE OF ALL** FSENT AT SAMPLING DATE 6/23/95 LINQUISHED RECEIVED HGN) TIME BY (SIGN) L'NQUISHED DATE RECEIVED TIME BY (SIGN) JJGN) DATE RECEIVED . IQUISHED (S TIME BY LAB WARKS: Soil Samples In 1-160, for I HeThand Sel Belle Eget

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THE PORT AUTHORITY OF MY & RU

Engineering Department Construction Division Materials Engineering Section

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PORT AUTHORITY OF NY & NJ eering Department - Materials Division Wen installation Report Sheel Zol 7 CONTRACT NO. 4 26-99-006 OPALLEA Well Development Report (NOTE: WATER LEVEL READINGS FROM TOP OF PVC) 6-24-99 WATER LEVEL AFTER 7" dia. Manhole cover dia. PVC pipe w/ locking cap Top of surface & cement grout L1 L2 = 5.2 Top of bentonite seal Ē2 L3 = 10.0' Top of well gravel filter Henings L3 15.5 Bottom of well 160' Bottom of boring Cap. [2" Boring diameter

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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

<u> </u>	Sheet 5 of 9
PROJECT: PN- Metri Metals Site	
BORING No. MW-CS	DATE: 6-24-97
FIELD READINGS BY: Tolkian	PID Model: M. Rap

IELD REAC	INGS BY:	1. Kean			PID Model:	// .	1606
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading			REMARKS
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ENGINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

·	··	Sheet 4 of 4
PROJECT: PN-/ Netro Metal Si	ta	
PROJECT: PN-Metro Metal Si LOCATION: as land out = 180' Se	o. 4 C-6	DATE: 6-24-59
BORING No: MW-C5	TOTAL No. OF SAI	<u> </u>
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THE PORT AUTHORITY OF MY & MU

Engineering Department
Construction Division
Materials Engineering Section
ROPING DEPORT

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FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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THE PURT AUTHORITY OF N & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

PROJECT: PN - Netro Mitals Site

BORING No. PA - C4

FIELD READINGS BY: - Run

PID Model: Mini Rae

PIEL	י מביאנ	MIGS BI.	- Ran			IFID MODEL: // LALL
TI	ME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	REMARKS
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THE PORT AUTHORITY OF N., & N.J.

ENGINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

			theet 3 of 3
PROJECT: PN- Metro M LOCATION: as laid out p	etals Site		
LOCATION: as laid out a	en drawing	DATE: 6-24-99	?
BORING No: P4 - C6	TOTAL No. OF	SAMPLES: 2	
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THE PORT AUTHORITY OF MY & MU

Engineering Department
Construction Division
Materials Engineering Section

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ì	PN-	Metro	Metal S	J u	<u> </u>	NAME OF	conti		1	BORING NO. PA-C7	SUMFACE ELEY.
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FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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THE PORT AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

	. PA-C7			 	DATE: (6-24-95
	INGS BY: -	T. Kyan			PID Model: Whimi Place
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	
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THE PORT AUTHORITY OF N.Y & N.J.

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ENGINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

		_	Sheet 2 of 2
OJECT: PN- Metro Metals Sit LOCATION: Os laid out as per dra JRING No: PA - C7	e		
LOCATION: Or laid out as per dra	winc_	DATE: 6-24-95	
LURING No: PA - C7	TOTAL No. OF SA	MPLES: Z	
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(SIGN)	TIME	BY (SIGN)	markasinnahadisha kari sa Ja
.INOUISHED	DATE	RECEIVED	•
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THE PORTAUTHORITY OF MY & MU

Engineering Department Construction Division Materials Engineering Section **BORING REPORT**

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	<u> </u>	Ports Fac			1_	Char	Villing		BH-116		
WH				_		U	•		CONTRACT NO.		DATE
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

THE PORT THORITY OF N.Y & .J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of

¿ECT:	by b4	U Ports. F	~c				
⁴IG No.	BN-	N-G ONou			DATE:	10/2/00 Mm RDE	
	INGS BY:	Office			PID Model:	MIMI RDE	
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THE POR' AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

			Sheet 3 of 3
JECT: PN- Oto Parts F	īc		
CATION: Asland outly Of 5	xyung	DATE: 10/2	la
ING No: BH-N6	TOTAL No. OF SAM	IPLES: 1 Sc	r/
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THE PORT AUTHORITY OF MY & M.J.

Engineering Department Construction Division Materials Engineering Section

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ж			CASING S	ZE HO	LE TYPE			,		DUND WATER LEVEL	<u> </u>
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	FALL			FALL			<u> </u>				
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THE PORT AUTHORITY (FINANCE)

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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PROJECT					NAME OF CONT			BORING NO.	SURFACE ELEV.
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LOCATION						1		CONTRACT NO.	DATE
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THE FURT AUTHORITY OF 1...Y & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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BORING No	BH 1	U SF	- BERT	H 03	DATE:	0.7 -0=	
FIELD READ	DINGS BY: /	CARLOS L	V . De 0=7	<u> </u>	PID Model:	9-2-99 Hini RAE	
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TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading		REMARKS	
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THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

			Sheet	301	3
PROJECT: PN - NAPORANO SITI	= BERTH	63			
LOCATION: \$ 24' NORTH. WEST OF TH	EORI GINAL LOCATION	DATE: 9-2-99	-		
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THE PORT AUTHORITY OF MY & MU

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

MAME OF CONTRACTOR NAME OF CONTRACTOR NAME OF CONTRACT NO. SURFACE ELEV. ATION ATION AND ALL AND SITE - BERTH 63 CRAIG TYZIII. ING BH-N1 CONTRACT NO. OATE 1/25.99.007 8/25/99 GROUND WATER LEVEL GROUND WATER LEVEL OBTO BETTOR M. OUGCh SPOON RE'SAMP! SAMP! SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE MERT. DEPTH BLOWSK' COV'D NO. ASTHOLT POWERRANT MET OF THE COATES CHANGE OF PROFILE ANGLE FILL SITE OF THE CASE OF THE						BORING F	(EPOH	i	,	Causas
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3 A Same 1-0 22' 4 Same 1-1 24' 5 A Same 10 3-3 B FEAT Bottom of foeing All Samples were Screened For voc's WITH A PID THE FOLLOWING SAMPLES WERE SAVED 4' - 4:5' SAVED AUTO THE REMAINING WERE DISCARDED.	HEAD		Augep	<u> </u>	'' <u>'</u> 3	<u> </u>				
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10 3-3 SAME JOHOM OF BORING AND SAMPLES WITH A PID THE FOLLOWIS SAMPLES WERE SAUED AND THE REMAINING WERE DICARDED. NO FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006	1.5.		1-0	22	11	<u> </u>	- — <u> </u>			_
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20 S'-15' SAUED AND THE REMAINING WERE DICARDED. No FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006				<u> </u>	_	MUH V	BID	<u> </u>	ollawy SAm	<u> 1965 WERE Saug</u>
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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

PROJECT: PN NAPORAND SITE - BERTH 63	
JORING No. BH-N1	DATE: 8/25/99
	PID Model: MINI RAE

		IN-SITU	HEAD-	BREATHING	
TIME	SAMPLE No.	Split Spoon Reading	Space Reading	Zone Reading	REMARKS
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1	IB		0	0	
	5		0	0	
	3A		· D	0	
	3B		0	0	
	4		0	D	
	5A	•		0	
	<u>5B</u>		0	0_	
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	FMC Ac	reement No	ı .: 201132-0	I IOS Effectiv	e Date: Monday, June 19, 2006

THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY COORD

			Sheet 3 of 3
PROJECT: PL LAPORANOS	ITE - BERTH 6	3	
.OCATION: Laid out in the field as per	drawing	DATE: 8/25/9	9
RORING No: BH- N 1	TOTAL No. OF SA	MPLES: }-	
SIGNATURE OF ALL RESENT AT SAMPLING	5 01	L	
ELINQUISHED - Ohl	DATE 8/25/99	RECEIVED	· · · · · · · · · · · · · · · · · · ·
BY (SIGN)	TIME	BY (SIGN)	81
ELINQUISHED	DATE	RECEIVED	
BY (SIGN)	TIME	BY (SIGN)	
HE VISHED	DATE	RECEIVED	· · · · · · · · · · · · · · · · · · ·
Y (SIGN)	TIME	BY LAB	
PEMARKS: 2 Samples taken 0.5'-1.5' Bothe #	in 2 one pt	That is	D 2 WAS, AND
4.0'- 4.5' Bottle #			
			
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THE PORT AUTHORITY OF MY & MU

Engineering Department
Construction Division
Materials Engineering Section
BORING REPORT

MARCO CONTRACTOR Note of Contractor Schild No. No								-		SHEET OF
NATION COLL IN THE FIELD OF PER AGAINS CONTRACT NO. 100 L18-10 CASHIG BUE NOLE TYPE 200 L18-10 LASHIG BUE NOLE TYPE 200 L18-10 LASHIG BUE NOLE TYPE 201 TIME OURS REALL 111 PM 55 TOURNE IN SHAPLE DESCRIPTION AND REMARKS NECTOR N. OUT HE BLOWSKE COYO NO. 121 LIFE DESCRIPTION AND REMARKS NOWSETT. DEPTH BLOWSKE COYO NO. 121 LIFE DESCRIPTION AND REMARKS NOWSETT. DEPTH BLOWSKE COYO NO. 121 LIFE DESCRIPTION AND REMARKS 122 LIFE DESCRIPTION AND REMARKS NOWSETT. DEPTH BLOWSKE COYO NO. 123 LIFE DESCRIPTION AND REMARKS 124 LIFE DESCRIPTION AND REMARKS 125 LIFE DESCRIPTION					1			6	LORING NO.	SURFACE ELEV.
The first of the f		NAYORA	400 SITE -	BERTH	<u> </u>	LRA,	16			
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11-16 20" Fill giry bi. of Sand little gravel, fr. Silf 14-16 D. 8 20" A Fill br. gravel; Sand little gravel, little silt gravel 8-8 12-2 18" D. 2-2 18" D. 2-2 18" D. 2-2 18" D. 2-2 18" D. September of Boring Formal little gravel, little silt gravel Formal little gravel, little gravel, little gravel, little silt gravel Formal little gravel, little	<u> </u>	<u> </u>			13	20 142	- M.	5-5am	te gravely	11.51 =
11-16 20" 11-16]					•	.,,,,	
11-16 1-16 1-16 1-16 1-16 1-17 1-16 1-17 1-16 1-17 1-18		* > *			5		<i>Le</i>			
11-16 1-16 1-16 1-16 1-16 1-17 1-16 1-17 1-16 1-17 1-18	Y	├ -	11/11	- "		611			1111	
10 8-8 15 read claying silt. Attlictive Sand 2-2 18" 6 A Sample 19:00 Postlor of Boring NOTE: All Samples were servented FOR YOC'S WITH A PHD S #1 (0.5' 1.5') And #3(4.5' - 5.0') were Saugh AND THE REMAINING WERE DISCARDED. NCFMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006	<u> }</u>	┼	11-16	120	1	Fr. 4.3	<u>-61. (~1</u>	- Dana	RITITIE GLANG	<u> </u>
10 8-8 15 red by claying 5.1t. Hill true Sand 2-2 18" 6 A Sample 19:00 Postlor of Boring NOTE: All SAMPLES WELL SCREENED FOR YOU'S WITH A PHD S #1 (0.5' 1.5') AND #3(4.5' - 5.0') WERE SAUGE AND THE REMAINING WELL TO STOCK WELL TO STOCK WITH THE REMAINING WELL TO STOCK WELL TO STOCK WELL TO STOCK WITH THE PROMINING WELL TO STOCK WELL TO STOCK WITH THE PROMINING WELL TO STOCK WELL TO STOCK WITH THE PROMINING WELL TO STOCK WELL TO STOCK WITH THE PROMINING WELL TO STOCK WELL TO STOCK WELL TO STOCK WITH THE PROMINING WELL TO STOCK WELL TO ST	AUGI	╀	14-16	 	1	 				
2-2 (B" 6 Nept 10.00 Postor of Boring Postor of Boring Note: All Sample's Well sersents For Year's with A PFD S#1 (0.5'-1.5') AND #3(4.5' - 5.6') WERE SAVED AND THE REMAINING WERE O'SCARDED.	<u> </u>	- -	b- 8	20	< A	F.11 br-	trace: F	5 and Li	H <u>le graval. lit</u>	tics. It _ 9.80
2-2 (B" 6 Nept 10:00 Postor of Boring September 10:00 Postor of Boring Septe	1	10 -	8-8		13	100-61	clayen	Ed Ibe	11ctive San	L
Postlost of Boring Note: All Samples were serseated for Yes: WITH A PTD S#1 (0.5'-15') AND #3(4.5' - 5.0') WERE SAUED AND THE REMAINING WERE VISCARDED. NCFMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006	· k_	L' _	2-2	13"	1. Λ.	· Sau	<u> </u>			
Postlope of Boring Note: All Samples were screened for Years with A PFD. 5 #1 (6.5'-1.5') And #3(4.5' - 5.0') were saust And The remaining were Tiscarded. No. FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006		1	2.2	110	6					19.0
NOTE: All SAMPLES WELL SCREAMED FOR YEAR'S WITH A PAID. S. #1 (0.5'-15') AND #3(4.5' - 5.0') WERE SAURD AND THE REMAINING WERE VISCARTED. NCFMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006		T	Ţ						Proffess of F	
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AND #3(4.5' - 5.6) WERE SAUSTS AND THE REMAINING WERE O'S CARDED. NC FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006		15		1						
AND THE REMAINING WERE DISCLARGED. NCFMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006		_					huD #3	145-	5.0 (WEDS	SAUST
NCFMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006		- -		 	7					
NC FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006		-			┪		· ·		STARTING LU	<u> </u>
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ering Department - Materials Division

Vell Installation Report		sheet 2 of 4								
PJ - NAPORANO	5178 - BERTH 63	CONTRACT NO 426-99-006								
Laid out in the	field as Per draw									
HW-N2 Typo A'	Monitor M. Dutset	5.35utch's 8/27/99								
'ell Development Report (NOTE, WATER LEVEL READINGS FROM TOP OF PVC)										
WATER LEVEL BGFORE	6.0 water Level After 6./	TAKEN 60 MINUTES AFTER								
7" dia. Manho		-								
* dia. PVC pipe w/ loc	cking cap — \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \									
, L1		Top of surface & cement grout								
L1 = _0.3'	*	a volloni grou.								
L2 = 2.7 -										
LZ		— Top of bentonite seal ·								
3 = <u>B'</u>	<u>∂′</u>	- Top of well gravel filter								
	 	196 2. 10. 19. 10. 10.								
•										
•										
4.0	openings									
L3	020									
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		,								
	*	— Botlom of well								
•	Cap	- Bottom of boring								
	<u> </u>									
	Boring diameter									

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006——
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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

				MEROMA		Sheet	3 014
PROJECT:	PJ-1	UAPORAN	0 site	- Ben	Th 63		
ORING No	MW-	N2 Dude		<u></u> _	DATE:	8/27/99	
RELD READ	INGS BY:	M. UNDE	H		PID Model:	MINI RAE	
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading		REMARKS	
7~	·		0	0			
	24		0	0	-		
	ZB		0	0			
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THE PULLT AUTHORITY OF N. . & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTOD' RECORD

			Sheet 4 of 4
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Engineering Department Construction Division **Materials Engineering Section**

BORING REPORT

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

GINEERING DEPARTMENT M. ARIALS ENGINEERING DIVISION PID READINGS

PID READINGS Z of 3 Sheet PN- Former Metro Metals PA-CL-EI DATE: 12/3/01 _RING No. FLD READINGS BY: PID Model: IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS Reading TIME No. Reading Reading Pm 0.0 0.3 2 0.4 00 0.4 0.0 0.0 0.7

THE PUKI AUTHORITA OF

MAL _RIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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Sheet 3 of 3ormer Metro Metals JECT: PA-Clo-El :NOITA DATE: **RING No:** TOTAL No. OF SAMPLES: **NATURE OF ALL ENT AT SAMPLING** DATE /2/3/6/ RECEIVED **INQUISHED** TIME BY (SIGN) JIGN) DATE RECEIVED NQUISHED TIME BY (SIGN) (SIGN) RECEIVED **NOUISHED** DATE BY LAB ' (SIGN) TIME

Engineering Department Construction Division **Materials Engineering Section** BORING REPORT

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NOTES: 1 — Length recovered; 0° — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger, OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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3INEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Sheet Z of 3

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KORING NO	. PACC	6-EZ			DATE: 12/5/0/
LD REAL	HNGS BY:	T. Ka			PID Model: /4
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GINEERING DEPARTMENT LERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

			Sheet 3 of 3
UJECT: PN - Former Metro			
:ATION: ± 5' East of PA(16	DATE: 12/	5/01
RING No: PACL-EZ	TOTAL No. (OF SAMPLES: 4	
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Engineering Department Construction Division Materials Engineering Section

	BORING REPORT						2
ÆCT					NAME OF CONTRACTOR	BORING NO.	SHEET OF SURFACE ELEV.
PN -	Forme	Metro M	ital_	·	Crais	PAC6-E3	<u> </u>
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NOTES: 1 — Length recovered; 0' — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF THE

GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION

PID READINGS

Sheet 2 of 3

10.	PN- 4	ones Met	ro Metals				
NRING N	o. PACL	0-E3	-0		DATE:	12/7/01	_
	DINGS BY:	1	Rean		PID Model:	14	•
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHIN Zone Reading	G	REMARKS	• .
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EI MEERING DEPARTMENT
MA. ALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

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	•		•	Sheet 3 of 3
JECT:	PN- Former Met	To Metals		
TION:	= 10' last of 1 PA-C6-E3	PA.CL	DATE: 12/7/	υ
ING No:	PA-CG-E30	TOTAL No.	OF SAMPLES:	
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Engineering Department Construction Division

					BORING REPORT	·	SHEET OF 3
JECT /	U- Former Metro Metals 10' Eart of PACU (Some local				NAME OF CONTRACTOR	PACL-E3A	SURFACE ELEV.
1						CONTRACT NO. 426-99-006	DATE / 11/6/
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

VGINEERING DEPARTMENT

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VGINEERING DEPARTMENT JEPIALS ENGINEERING DIVISION PID READINGS

87

Sheet 2 PACG- E3A . JRING No. DATE: 12 01 The **≱ELD READINGS BY:** PID Model: เพ-รเกับ HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME No. Reading Reading Reading nel odos 0.4 2

THE PURI AUTHORIT

E NEERING DEPARTMENT
MA ... HALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

83

		She	et 3 of 3
JECT: PN- Former 1 TION: 10' earter PACLE HNG No: PACLE-E3A	Netro Metals		
TION: 10' east of PACLE	/ Same Secution as PACG-E	3 DATE: 12/11/01	
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Engineering Department Construction Division Materials Engineering Section

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ZO	Forme ! East	of PAC	6					CONTRACT NO. 426-99-606	DATE 12 / 11 / 61
ON		CASING SI	ZE HOLE	TYPE	ļ	_		UND WATER LEVEL	
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PURE AUTHORITY OF THE WALL

GINEERING DEPARTMENT

... ERIALS ENGINEERING DIVISION
PID READINGS

85

Sheet 2 of 3 RO PACL-E4 12 RING No. DATE: 01 HELD READINGS BY: PID Model: W-SITU HEAD. BREATHING SAMPLE Split Spoon Space . Zone REMARKS Reading TIME No. Reading Reading 0.2 1 . 0.0 2 0.3 0.0 3 0.6 0. 4 0,2 0.0

THE PORT AUTHORITY OF N.Y & N.J.

EI NEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Do

			Sheet 3 of 3
JECT: PN- Former Metro N.	Idals		
JECT: PN- Former Metro N. TION: ± 20' east of PAC. ING No: PACLE-E-4	4	DATE: 12/11/	01
ING No: PACL-E-4"	TOTAL No. OF SAN	APLES: 4	
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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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NOJECT						NAME OF CONTI			BORING NO.	SURFACE ELEY.
PN-	Metro	Ma	عاه			Crow	rilling]	BH-PAC6 65	
ATION									CONTRACT NO.	DATE
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Sheet 2 of 2 PN - Matro Matel ROJECT: 4/29/01 BN- PA C 6 55 BORING No. DATE: O Home **ELD READINGS BY:** PID Model: MINE RUE IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone **REMARKS** TIME No. Reading Reading Reading PN 1.0 0,9 A 1,2 3 B 2.5 15

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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.
FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Sheet Z of Z

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Engineering Department Construction Division Materials Engineering Section

BORING REPORT SHEET MECT NAME OF CONTRACTOR BORING NO. SURFACE ELEY. PN-MOTH MOTOL Cray Onlle BN PACCET CONTRACT NO. 4/30/02 426-99-006 PACCES ENFOT PACC GROUND WATER LEVEL A-UZZZY HAMMER Date Depth Remarks 9 49 4/30 10 # FALL 30 Asphal Milliage 103/2 D Couls 9.0 71 20 PECTOR O House SPOON *SAMPLE DESCRIPTION AND REMARKS ASING SAMP. RE-DEPTH BLOWS/6*)WS/FT COV'D NO. LINE LOCATES CHANGE OF PROFILE 0 Asphat Mellings, Little M. F. Brown Soud لن ا MISCI-II-Sand, Grave, Craden use, Matel, ETC Tapped Speed 121 2 50 8 - HX-F Gray Brown Sand, tr Gravel, TI SIN 49 16 4 25- 23 174 14-16 ょ 16-18 215 Same lo_{-a} 10 Bottom of Boxis - 16 TPHE By chen but in field

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane

3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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Sheet 2 of 2

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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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Engineering Department Construction Division Materials Engineering Section

BORING REPORT SHEET NAME OF CONTRACTOR BORING NO. SURFACE ELEV. LAPORANO SITE · BERTH 63 CEAIG BH NSB CONTRACT NO. DATE East FROM BH NSA 126-99.047 8/27/99 CASING SIZE HOLE TYPE GROUND WATER LEVEL Date Time Depth Remarks 4.0. HAMMER # FALL S. BURNS ECTOR M. Oudeh SPOON BLOWS/6* SAMPLE DESCRIPTION AND REMARKS
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Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

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Engineering Department Construction Division Materials Engineering Section

BORING REPORT NAME OF CONTRACTOR BORING NO. SURFACE ELEV. NAPORAND SITE-BERTH 63 CRAIG CONTRACT NO. DATE 426-99-007 CASING SIZE HOLE TYPE 8/25/99 GROUND WATER LEVEL Date Time Depth Remarks **1.**0. HAMMER # FALL # FALL / =1R Burns PECTOR M. Oudeh SPOON BLOWS/6* *SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE MG RE. SAMP.8/FT. COV'D NO. DEPIH Auge Bottom of boing →FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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Engineering Department Construction Division Materials Engineering Section

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane

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SINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Sheet 2 of 2

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = suger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

				· ·		Jueet	<u>_ or 3</u>
<u>ाः</u>	PN - 70	rmer Met	10 Meta	L			
ORING No	. PA ·CT	7-51			DATE:	12/4/01	
ELD READ	NGS BY: 7	. 14a_			PID Model:	14	
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	G	REMARKS	
Am	1 -		33.0	6.0			
	2		64.9	0.0-			
	3 .		7.7.	0.0			
V	4		3.8	0.0			
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THE PORT AUTHORITY OF N.T & N.J.

IGINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

103

			Sheet 3 of 3
OJECT: PN - Former Metro	Metals		
-CATION: = 1'S of PA - C7	· 1	DATE: 12/4	101
URING No: PA-C7	TOTAL No. OF SAM	IPLES: 4	
IUNATURE OF ALL	-0	, .	
SENT AT SAMPLING		88866888888888888888888888888888888888	000000000000000000000000000000000000000
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(SIGN) Gran	TIME	BY (SIGN)	389888888999 <u>88888888888888888888888888</u>
INQUISHED	DATE	RECEIVED	-
Y (SIGN)	TIME	BY (SIGN)	
JNQUISHED	DATE	RECEIVED	
Y (SIGN)	TIME	BY LAB	
EN. KS: 4 samples in 4)	160g jars		
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Engineering Department Construction Division Materials Engineering Section

					BORING REPORT	••	SHEET OF
VECT		Mitro Mel	مان		HAME OF CONTRACTOR	PA-C7-E-1	SURFACE ELEV.
NON ,	W. 4	PA-C7	······································			CONTRACT NO. 424-99-006	DATE
OH .	- 		IZE HOLE	TYPE		ROUND WATER LEVEL	
	O.D.	*I.D.	140	nger	Date Time Der	pth Re	marks
. ER	FALL	HAMMER	# FALL		12/4/01 B:05 A	No water e	ncontered
SA	Clan	Kidan					
	1	R	•				
ING S/FT.	DEPTH	BLOWS/6"	RE- 1 COV'D	SAMP.2 NO.	LINE LOC	DESCRIPTION AND REMARK CATES CHANGE OF PROFILE A. METHE, WAS	<u> </u>
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane

THE PORT AUTHORITY OF N.Y & N.J.

105

L JINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

JECT:	PN- Fra	ner Metro	Metals		
RING NO	. <i>PA</i> -C	7-E-1		· · · · · · · · · · · · · · · · · · ·	DATE: 12/4/01
) REAL	HNGS BY:	TRa		,	PID Model: 14
	T	เพาะเบ	HEAD-	BREATHING	3
, IME	SAMPLE No.	Split Spoon Reading	Space Reading	Zone Reading	REMARKS
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1	2	·	983	0.0	
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FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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THE PORT AUTHORITY OF N.Y & N.J.

INEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

106

·			Sheet 3	of 3
JECT: PN-Mitro Metats (Former)			
ITION: + 1' WE' AA-CT		DATE: /2/	4/01	
ING No: PA-C7-FAE	TOTAL No. O	SAMPLES: 4		
ATURE OF ALL	-0		х	
INT AT SAMPLING	1.1Go-	2808288828408818681888888	**************	X4962821888082218558
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open and rod; Y = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, and heave in casing, etc.

THE POR AUTHORITY OF N.Y W.J.

108

...GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet Z of 3

NECT:	PN-7	ormer Met	to Metal	9	
DRING NO	· · · · · · · · · · · · · · · · · · ·	17-W-1			DATE: /2/4/01
LD REAL	DINGS BY:	T. Ryan			PID Model: 14
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	G REMARKS
Am	1.1.		37.1	0.0	
A	2]	25.6	0.0	
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V	4		. 5.1	0.0	
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MALERING DEPARTMENT MALERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

109

			Sheet 3 of 7
ECT: PN - Former Met	o Metals		
TION: + IW of PA-C	7	DATE: 12/	4/01
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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE POPT AUTHORITY OF N.Y & N.J.

IGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Stieet 2 Metr. Metalo IOJEUS: HORING NO. BH-MW-NI-NI DATE: 12 **3LD READINGS BY:** PID Model: W-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME No. Reading Reading Reading 00 00 D.B 0.0

THE PORTAUTHORITY OF N.Y N.J.

MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

112

				Sheet 5	of)
DJECT: PN-	Former Metr	· Metals			
ATION: 1	'North of m	W-N1	DATE: /2	14/61	
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Engineering Department Construction Division Materials Engineering Section ROBING BEDORT

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TION L) of M	W-N1		_					CONTRACT HO. 426-99-006	DATE / 4/1/
он	- 0 	CASING SI	ZE HOLE	TYPE				GRO	OUND WATER LEVEL	101911
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HOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE POR AUTHORITY OF N.Y M.J.

MATERIALS ENGINEERING DIVISION PID READINGS

114

Sheet 2 of 3

DJECT:	PN- tra	un Motio	Metals			
ON DIMRC	BH-MW-N	1-W1			DATE:	12/4/01
	NIGS BY: 7	· Ky			PID Model:	14
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	• • • • • • • • • • • • • • • • • • •	REMARKS
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THE PORT AUTHORITY OF N.Y P. N.J.

JINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

115

			Sheet 3 of 3
JECT: PN. Former Metro W	etals		
ATION: ±1' Wutof MW-NI	•	DATE: 12/4/0	1
ang noby MW-NI-WI	TOTAL No. OF SAM	PLES:	
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IATURE OF ALL			
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Engineering Department Construction Division Materials Engineering Section

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NECT .	France	Metro M	etals			RFACE ELEV.
ПОН	±1'5	buth of	MW-N	<u> </u>	CONTRACT NO. 10A / 426-99-006 /	2/4/01
ON	•	CASHG S	ZE HOLE	TYPE	GROUND WATER LEVEL	•
ER *(0.D.	"LD. HAMMER	<u> </u>	ligh	Date Time Depth Remark	
	FALL		FALL_		12/4/01 2:35 p 1.0' Perched, seep	ng under
ER	a.K	ideo		·	pavement	
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used

2 — U — undisturbed; A — auger; OER = open end rod; V = vane

3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

MATERIALS ENGINEERING DIVISION PID READINGS

sheet Z of 3

ORING No. BH-MW-NI-5. DATE: 12461 BLO READINGS BY: T. R.C. PID Model: 14 W-SITU HEAD-Space Reading R	
TIME SAMPLE Split Spoon Space Zone Reading Reading Reading Reading Control Con	
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THE PORT AUTHORITY OF N.Y 2 N.J.

JINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

			_		·	Sheet 3	of 3
)JECT:	PN-7	orner Me	tro Meta	6			
ATION:	±1'	South of	MW-N1	 :	DATE: /2/	4/01	
RING No:	BH-mh	1 NI-501	тот	AL No. OF SA	MPLES: 4	· ·	
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SIGN)			TIME		BY (SIGN)		
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Engineering Department Construction Division Materials Engineering Section PARING PERART

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE POR AUTHORITY OF N.Y N.J.

120

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Street Z of 3 PN- Former Mete. Metals DRING NOPHAW-NI-EI, DATE: 12/4/01 PID Model: 14 **ID READINGS BY:** M-SITU HEAD-BREATHING SAMPLE Split Spoon **Space** Zone REMARKS TIME No. Reading Reading Reading 0.0 2 00 S. S 0.0

> FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

THE PORT AUTHORITY OF N.Y P.N.J.

L JINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

121

			Sheet 3 of 3
JECT: PN - Former Metro	Metals		
ATION: + 1'E. of MWN1.	•	DATE: 12/	1/01
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Engineering Department Construction Division Materials Engineering Section

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2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y KIN.J.

L JINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

173

Sheet Z PN-7 NEU1: MUCS- NI BH-RING No. DATE: 12 LD READINGS BY: PID Model: ัพร์กับ HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME No. Reading Reading Reading 4.3 L 5.1 0.0 0.0

> FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

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MALERING DEPARTMENT MALERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

				Sheet 3	of 3
JECT:	PN- Former Metro 1	Netals			
ATION:	± 1'Youth of much	• 1	DATE: 12/5	01	
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Engineering Department Construction Division

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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YGINEERING DEPARTMENT TERIALS ENGINEERING DIVISION

176

PID READINGS

Sheet 2 of 3

	PN- For	mer Mete	Motel	 _	
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THE PORT AUTHORITY OF N.Y & N.J.

INEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

			Sheet 3	of 3
JECT: PN- Journes M	tho Metals	_		
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Engineering Department Construction Division Materials Engineering Section

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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7.:

)INEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

129

Sheet 2 of 3 BH-MWCS- SI DATE: 121 HING No. 01 14 PID Model: *D READINGS BY: IN-SITU HEAD-BREATHING SAMPLE Split Spoon REMARKS Space Zone Reading MME No. Reading Reading PM 1. 6.2 4.1 0.0 0.0

THE PORT AUTHORITY OF N.Y & IV.O.

E INEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

			Sheet 3 of	3
JECT: PN - Frimes Metro M	etals			
ATION: + 1'South of mwcs		DATE: 12/5	101	
ung no: BH-MWCS-SI	TOTAL No. OF SA	MPLES: 4		
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Engineering Department Construction Division Materials Engineering Section

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, eand heave in casing, etc.

THE PORT AUTHORITY OF N.Y & N.J.

L INEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

132

Sheet Z of 3 BH-mwcs-E1 RING No. DATE: PID Model:) READINGS BY: เพ-รศบ HEAD-BREATHING SAMPLE Split Spoon REMARKS Space Zone ME No. Reading Reading Reading PM 4,2 0.0 51 0.0 3 0.0 00

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018———

THE PORT AUTHORITY OF N.Y P. N.J.

MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

·			Sheet 3 of 3
DJECT: PN- Former Me	tro Metals		
ATION: 1/ East of 1	mwcs	DATE: 12/5	101
RING NO: BH-MWCS-E	TOTAL No. OF SA	MPLES: 4	
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THE PORTAUTHORITY OF RAY & RUJ

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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2 — U = undisturbed; A = auger; OER = open end rod; V = vane

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FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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Sheet Z of 3

E. .NEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Port Name Metro Metals Site IEC. BH PACL E-89 5/16/02 MG No. DATE: TREADINGS BY: A. Koss PID Model: Min. Rac เพ-รเทบ HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS ME Reading Reading Reading No. 1m 0.0 0.0 l 3

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19<u>, 2006</u> Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

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L..GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

,		She	et 3 of 3
OJECT: Port Neunt Moto Me	Allo Sote		
JATION: \$ 60.0' E of BH	-PA.C.6 E-7	DATE: 5/16/02 APLES: 2 المود	
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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; Y = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y & N.J.

E. NEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

				•	Sheet 2 of 3
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READ	NGS BY:	HILOSS			PID Model: Mini Rac
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ATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

			Sheet 3 of 3
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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing etc.
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EN IEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Sheet 2 of 3 ort Neval Metro Metals Site EC. BH. PA-C. 6 E.16 NG No. 5/16/02 DATE: H. Koss READINGS BY: Mini Race PID Model: พ-รถบ HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS ME No. Reading Reading Reading 2.7) . 0,0 2 0.0 0.0 0.0 0.0 FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

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NGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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HOJECT: Port Newark Metro Me	tals Sutc		
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Engineering Department Construction Division **Materials Engineering Section**

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Sheet Z of 3 PN- Former Metro Metals PQ0 PA-C6-No1 HING No. DATE: 3/01 WELD READINGS BY: 🔨 PID Model: IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME Reading No. Reading Reading PM 05 0.0 7 0.0 0.4 O.0 0.3 6.0 FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006-

: Agreement No.: 201132-005 Effective Date: Monday, June 19, 200 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

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3INEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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THE PORTAUTHORITY OF RIVERNA

Engineering Department Construction Division Materials Engineering Section BORING REPORT

NAME OF CONTRACTOR BORING HO. **GURFACE ELEY.** Metro Metals PA-C6-N-Z CONTRACT NO. DATE PA-C6 421.-99-006 'o / CASING SIZE HOLE TYPE GROUND WATER LEVEL H. aneis Date *O.D 1.D. Time Depth Remarks HAMMER 8:00 A Water # FALL TOR **BPOON** *SAMPLE DESCRIPTION AND REMARKS
LINE LOCATES CHANGE OF PROFILE SAMP.2 RE-COV'D DEPTH BLOWS/6" NO. Bottom of Bon 6.2×

THE PUKT AUTHURITY OF N.Y MIN.J.

INEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Sheet Z of 3 PNtormer Metro C6 - N.7 MNG No. DATE: PID Model: **D READINGS BY:** 14 HEAD-เพ-รเบบ BREATHING SAMPLE Split Spoon Space Zone REMARKS ME No. Reading Reading Reading Am 0.0 -FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006-

THE PORT AUTHORITY OF N.Y & N.J.

E. INEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

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Engineering Department Construction Division Materials Engineering Section **BORING REPORT**

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NOTES: 1—Length recovered; 0" — Loss of Sample, T — Trap used

5 FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

NG No.		<i></i>			DATE: 12	7/01	
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ENLINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

	•			Sheet 3 of 3
ECT: PN-70	mes Metr	· Metals		
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Engineering Department Construction Division Materials Engineering Section

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NECT						NAME OF CONTRA	CTOR	В	ORING NO.	SURFACE ELEV.
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger, OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE POR AUTHORITY OF N.Y WIN.

...GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

153

Sheet >

PN- Former Motro Metals JRING No. DATE: 01 "LD READINGS BY: PID Model: IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space . Zone REMARKS TIME No. Reading Reading Reading 0.4 0.0 0.5 0.0 0,8 6.0 0.5 0.0

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

THE PORT AUTHURITY OF IV. T & IV. J.

MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

			Sheet 3 of 3
JECT: PN - Former Metro Me	tels		
ATION: + 1' West of PA-C6		DATE: /2/3/c	07
RING No: PA-C6-W-1	TOTAL No. (OF SAMPLES: 4 + //	Jup
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Engineering Department Construction Division Materials Engineering Section

•		SORING REPORT		SHEET OF
N- Jones Metro Metals	_	HAME OF CONTRACTOR	PA-C6-W-Z	SURFACE ELEV.
±5 West of PA-CU	e	3	CONTRACT NO	DATE 12/5/01
ON CASING SIZE	HOLE TYPE		OUND WATER LEVEL	
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ECTOR. T. Ga				
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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IGINEERING DEPARTMENT ' MATERIALS ENGINEERING DIVISION PID DEADWIGS

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PID READINGS 2 of 3 Sheet PN- Former Metro Metals PA-C6-WZ 12/5/01 DORING No. DATE: TELD READINGS BY: PIO Model: Company of the Compan IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS Reading TIME No. Reading Reading AM 0.0 2 0.9 0.0 3.0 .0.0 0.0

THE PORT AUTHORITY OF N.Y KIN.J.

GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

				Sheet 3 of	: 3
JJECT: F	N- Former Metro	Metals			
:ATION:	±5' West of PA	C6	DATE: /2	15/01	
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Engineering Department Construction Division Materials Engineering Section

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- Former Metro Metals				Crais				PACL-W3	TOTAL COL		
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = suger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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A. .NEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Sheet 2 of 3 EC: 12/7/01 MG No. PACL DATE: **READINGS BY:** PID Model: พริกับ HEAD-BREATHING Split Spoon SAMPLE Space Zone **REMARKS** , ME Reading Reading No. Reading 1-M 49 0.0 6.3 0.0 5.5 6.0 5.3 6.0 FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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EN VEERING DEPARTMENT MA1 ALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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T: ·	Pp- Former Mei	tro Metals		
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Engineering Department Construction Division **Materials Engineering Section** PARING PERART

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open and rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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.1GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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Sheet Z of 3 Mitro Metals DATE: 01 SURING No. ۲ PID Model: TID READINGS BY: เพราบ HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS Reading TIME No. Reading Reading 0.2 0.0 0.4 0.0 0.7 0.0 06 8 -0

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JINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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Anno: 4 samples in 4-16 g jans.	
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Engineering Department Construction Division Materials Engineering Section

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger, OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE POP AUTHORITY OF N.Y Z N.J.

LAGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

145

Sheet Z of 3

Metro Metalo **IOJECT:** 12 DATE: BORING No. **BLD READINGS BY:** PID Model: 14 เพ-รเกับ BREATHING HEAD-SAMPLE Split Spoon Space Zone REMARKS Reading TIME No. Reading Reading AM 4.7 0.0 0.0 3 7.2 0.0 1.4 0.0

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

THE POF AUTHORITY OF N.Y N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

. 166

			,	Sheet 3 of 3
OJECT:	PN- Former Metro			
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Engineering Department Construction Division **Materials Engineering Section**

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE POF ~QUTHORITY OF N.Y ~ N.J.

MATERIALS ENGINEERING DIVISION PID READINGS

168

Sheet 2 PN-**ROJECT:** tomes HORING No. PACG-S-3 DATE: 12 101 ELD READINGS BY: 14 PID Model: IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME No. Reading Reading Reading AM 14.7 1. 0.0 2 0.0 9.4 3 0.0 10.3 7.0 0.0

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

MALERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 3 of 3 former Metro Metals JECT: 121 ATION: DATE: 7/01 PACG-S3 uNG No: TOTAL No. OF SAMPLES: **LATURE OF ALL ENT AT SAMPLING** DATE 12/7/01 NQUISHED RECEIVED TIME BY (SIGN) IGN) **QUISHED** DATE RECEIVED SIGN). TIME BY (SIGN) IQUISHED DATE RECEIVED (SIGN) TIME BY LAB

THE PORT AUTHORITY OF MY B MU

Engineering Department Construction Division Materials Engineering Section

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IGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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¿ of 3 Sheet ormer Γ: PACG- SY ORING No. DATE: 12 0) **RELD READINGS BY:** PID Model: IN-SITU HEAD-BREATHING SAMPLE Split Spoon REMARKS Space Zone Reading Reading TIME No. Reading 1.0 0.0 2 0.9 0.0 3 1.3 0.0 1.7 ٥٥

THE PORT OTHORITY OF N.Y & A.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

177

				Sheet 3 of 3
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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc. FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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THE PUP AUTHURITY OF W.T ~ W.V.

174

Sheet 2 of 2 PN- Motro Motals Wbu: BH-PA-C6-55 ORING No. 4/29/02 DATE: 9 Hom **LD READINGS BY:** PID Model: MINI PAG เพ-รเบบ HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME No. Reading Reading Reading 17-14 0,2

THE PORTAUTHORITY OF MY & MU.

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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MATERIALS ENGINEERING DIVISION PID READINGS

Sheet Z of Z OVECT:PN-Metro Matals BN-14 CE STB 4/29/02 DRING No. DATE: LD READINGS BY: PID Model: MINI RAG D Howe พรกับ HEAD. BREATHING SAMPLE Split Spoon Space Zone REMARKS ·TIME No. Reading Reading Reading 174 0, 1 5.6 G. 0 0,5 0.3 FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006-

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THE PORT AUTHORITY OF MYS MU

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018

THE PUKY AUTHURITT OF IN.T TIN.O.

JINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

178

Sheet 2 of 2 OUL : PN- Matro Matek 4/29/02 BN-PA C-6 5-6 RING No. DATE: LO READINGS BY: PIO Model: MIM PBB Dyourc PIO Model: IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME Reading No. Reading Reading 0,2 BW 0.4 0.2 0.2.

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF IN TA IN. J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

180

Sheet Zof Z PN Man Hetals ¿CT: BORING No. PAI PA-CE ST DATE: 4/30/02 HELD READINGS BY: O Howe PID Model: MIN. ROB IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME No. Reading Reading Reading PM 12 0.3 UQ

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Engineering Department Construction Division Materials Engineering Section

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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APPENDIX B

Table B-1 Survey Data Boring and Monitoring Well Location and Elevations Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
PA-C6-S1	673493.03368	590899.38016		
PA-C6-S2	673489.03368	590899.38016		
PA-C6-S3	673484.03368	590899.38016		
PA-C6-S4	673474.03368	590899.38016		
PA-C6-S5	673454.03368	590899.38016		
PA-C6-S5A	673454.03368	590899.38016		
PA-C6-S6	673464.03368	590899.38016		
PA-C6-S7	673469.03368	590899.38016		
PA-C7	673132.08006	590627.12031	307.70	-
PA-C7-W1	673132.08006	590626.12031		
PA-C7-E1	673132.08006	590628.12031		Ì
PA-C7-N1	673133.08006	590627.12031		
PA- <u>C7-</u> S1	673131.08006	590627.12031		

Note: Horizontal survey data of borehole/well locations drilled by Port Authority personnel are presented in NAD 83 datum.

Vertical survey data of borehole/well locations drilled by Port Authority personnel are presented in Port Authority datum which is 297.65 above mean sea level based on NGVD 29 datum.



Table B-1 Survey Data Boring and Monitoring Well Location and Elevations Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

ÎTEM	NORTH	EAST	ELEVATION	DESCRIPTION
BH-N1	673883.79667	590073.72762	306.68	-
BH-N1-W1	673883.79667	590072.72762	1	
BH-N1-E1	673883.79667	590074.72762		
BH-N1-N1	673884.79667	590073.72762		
BH-N1-S1	673882.79667	590073.72762		
MW-N2	674086.01241	590257.21356	307.69	RIM
<u> </u>			307.39	P.V.C.
			307.69	ASPHALT
MW-N5	673099.41927	590592.00169	307.21	RIM
			306.94	P.V.C.
ì			307.10	G.L.
BH-N5	673214.02411	590546.88200	307.10	•
BH-N6	673456.70000	590392.00000	307.80	-
BH-N7	673354.90000	590519.30000	308.30	•
MW-C1	673963.24423	590537.61748	305.53	RIM
			305.37	P.V.C.
			305.50	G.L.
MW-C2	673676,53592	590910.69377	307.17	RIM
			306.80	P.V.C.
		ļ	307.20	G.L.
MW-C3	673652.64794	590635.23255	308.35	RIM
			308.12	P.V.C.
	Ì		308.30	G.L.
MW-C4	673695.72387	590380.99591	307.11	RIM
\ \ \ \ \ \			306.72	P.V.C.
			307.10	G.L
MW-C5	673310.77792	590927.06172	307.51	RIM
[307.42	P.V.C.
			307.5	G.L.
MW-C5-W1	673310.77792	590926.06172		
MW-C5-E1	673310.77792	590928.06172		
MW-C5-N1	673311.77792	590927.06172		
MW-C5-S1	673309.77792	590927.06172		
PA-C6	673494.03368	590899.38016	307.30	•
PA-C6-W1	673494.03368	590898.38016		
PA-C6-W2	673494.03368	590894.38016		
PA-C6-W3	673494.03368	590889.38016		
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PA-C6-E3	673494.03368	590909.38016		
PA-C6-E4	673494.03368	590919.38016		
PA-C6-E5	673494.03368	590939.38016		
PA-C6-E6	673494.03368	590929.38016		
PA-C6-E7	673494,03368	590949.38016		
PA-C6-E8	673494,03368			
PA-C6-E9	673494.03368	591009.38016		
PA-C6-E10	673494.03368	591049.38016		
PA-C6-E11	673494.03368			
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Table B-2 Coordinate Data - Soil Boring Locations Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
SB-1	673301.28	589787.87	NA	•
SB-2	673314.09	589864.68	NA	•
SB-3	673241.51	589824.85	NA	•
SB-4	673400.89	589886.01	NA	*
SB-5A	673208.79	589893.13	NA _	*
SB-5B	673548.46	589935.80	NA	•
SB-5C	673864.8	590026.84	NA	*
SB-5D	673847.72	590220.29	NA	•
SB-5E	673346.82	590117.87	NA	•
SB-5F	673184.6	590318.44	NA _	•

Notes: * Survey data of borehole locations drilled by Excel Environmental Resources, Inc. are presented in NAD 83 datum and are of proposed and not as built boring locations.

NA - Not Available



ADDITIONAL SAMPLING REPORT

ADDENDUM NO. 3 to

EXHIBIT I

to Lease No. L-PN-264

between

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

and

PORT NEWARK CONTAINER TERMINAL LLC

For the Port Authority

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For the Lessee

ADDITIONAL SAMPLING REPORT

ADDENDUM NO. 3

to

EXHIBIT I

to

Lease No. L-PN-264

between

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

and

PORT NEWARK CONTAINER TERMINAL LLC

June 2002

PORT NEWARK CONTAINER TERMINAL, LLC ADDITIONAL SAMPLING REPORT

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1.0 INTRODUCTION

In September and October 2000 and April and May 2002, the Port Authority of New York and New Jersey (the "Port Authority") conducted supplemental soil and groundwater sampling at the premises under Port Authority Lease No. L-PN-264 between the Port Authority and Port Newark Container Terminal LLC ("PNCT"). The soil sampling was performed to further delineate soil exceedances detected during a baseline investigation conducted by PNCT and the supplemental groundwater sampling was performed to respond to comments received from the New Jersey Department of Environmental Protection ("NJDEP").

2.0 FIELD ACTIVITIES

The purpose of the supplemental soil investigation was to provide additional soil delineation to further establish current environmental conditions of subsurface soils. The purpose of the supplemental groundwater investigation was to provide additional water quality data for the area located upland of Berths 51 to 61 at Port Newark. Sampling locations were designated by the Port Authority. The area encompassing the terminal is approximately 154 acres. Figure 1 presents the Site Plan as provided by GEOD Corporation, a NJ licensed land surveyor.

The supplemental investigation activities included the drilling of 20 soil borings and the collection of 5 groundwater samples at locations shown in Figure 1. Table 2-1 provides a summary of the analytical methods performed. All investigative work conducted for the supplemental investigation program was performed in accordance with the NJDEP Field Sampling Procedures Manual, May 1992. Information collected during the investigation was recorded in a bound fieldbook and in conformance with the Port Authority's "Environmental Baseline Field Program, Port Newark, June 1999".

2.1 SOIL SAMPLING PROGRAM

The supplemental soil sampling program was conducted at the site on September 7 and 8, and October 2 and 3, 2000. Soil borings were advanced using a combination of hand auger and hollow stem auger ("HSA") drilling techniques. Hand augering was performed to advance the first 6 feet of each boring advanced deeper than 2 feet below ground surface ("bgs"). The HSA techniques were used to advance the remainder of the soil borings that were drilled to a final depth of 11.5 feet bgs. The soil borings that were completed at depths less than 11.5 bgs were completed exclusively by hand augering. Continuous samples were collected from borings advanced via HSA techniques by using 2 3/8-inch inside diameter carbon steel split-spoons with all samples collected from beneath the asphalt cover and subbase. A total of 20 soil samples were collected for laboratory analysis. Soil boring logs are included in Appendix A.

The following summarizes the soil samples collected from the borings:

Sample ID	Boring	Sampling Depth	Sampling Date
PO-BH02A-090800	BH-MW-2A(1)	11-11.5 feet	09/08/00
PO-BH02B-090800	BH-MW-2B ⁽¹⁾	11-11.5 feet	09/08/00
PO-BH02C-090800	BH-MW-2C ⁽¹⁾	11-11.5 feet	09/08/00
PO-BH02D-090800	BH-MW-2D ⁽¹⁾	11-11.5 feet	09/08/00
PO-BH02E-090800	BH-MW-2E ⁽¹⁾	11-11.5 feet	09/08/00
PO-BH13A-090700	BH-MW-13A ⁽²⁾	6.5-7 feet	09/07/00
PO-BH13B-090700	BH-MW-13B ⁽²⁾	6.5-7 feet	09/07/00
PO-BH13C-090700	BH-MW-13C ⁽²⁾	6.5-7 feet	09/07/00
PO-BH13D-100300	BH-MW-13D ⁽²⁾	6.5-7 feet	10/03/00
PO-BH13E-100300	BH-MW-13E ⁽²⁾	6.5-7 feet	10/03/00
PO-BH14A-090700	BH-MW-14A ⁽²⁾	1.5-2 feet	09/07/00
PO-BH14B-090800	BH-MW-14B ⁽²⁾	1.5-2 feet	09/08/00
PO-BH14C-090800	BH-MW-14C ⁽²⁾	1.5-2 feet	09/08/00
PO-BH14D-090800	BH-MW-14D ⁽²⁾	1.5-2 feet	09/08/00
PO-BH14E-100300	BH-MW-14E ⁽²⁾	1.5-2 feet	10/03/00
PO-BH14F-100300	BH-MW-14F ⁽²⁾	1.5-2 feet	10/03/00
PO-BH14G-100300	BH-MW-14G ⁽²⁾	1.5-2 feet	10/03/00
PO-BH14H-100300	BH-MW-14H ⁽²⁾	1.5-2 feet	10/03/00

⁽¹⁾ Indicates that the boring was advanced using a hand auger to 6 feet bgs and completed using HSA drilling techniques to final depth.

Sample intervals for laboratory analysis in each boring were selected based on the delineation information needed at each area (i.e., horizontal or vertical). Actual sample depth intervals varied depending on several factors, as follows:

- The soil recovered for each sample needed to be sufficient to fill the required sample jars. At times, it was necessary to collect soil from more than a six-inch interval to fulfill this requirement.
- In instances where a confining layer was encountered before reaching the water table, a sample was collected directly above the confining layer thereby not compromising the layer by drilling through it.
- When elevated photoionization detector ("PID") readings or an odor not associated with natural organic material was detected while field screening split-spoon samples, these samples were also sent for analysis.

Soil sampling was conducted in accordance with the following procedure:

- 1. Extract the split-spoon from the borehole, open it and lay it on plastic. In the case of borings completed using a hand auger, extract the auger and transfer the auger contents to a decontaminated stainless-steel bowl.
- 2. Log the sample and perform headspace screening analysis using a PID.
- 3. Transfer the soil to a decontaminated stainless-steel bowl, if necessary, and homogenize using a decontaminated stainless-steel spoon.

⁽²⁾ Indicates that the boring was advanced using a hand auger to final depth.

- 4. Transfer homogenized soil to the laboratory supplied sample containers.
- 5. Label the sample and record sample information in the field book.
- 6. Place labeled sample in a cooler with ice.
- 7. Complete the chain of custody form and ship samples to the laboratory for analysis.

Sampling equipment was decontaminated according to the following procedure before use at each discrete sample location:

- 1. Wash the equipment with non-phosphate detergent and potable water.
- 2. Rinse with potable water.
- 3. Rinse with deionized water.
- 4. Allow equipment to air dry.
- 5. Wrap equipment in aluminum foil.

Soil samples were analyzed for the following parameters:

- Polynuclear Aromatic Hydrocarbons (PAHs);
- Polychlorinated Biphenyls (PCBs);
- Select Target Analyte List (TAL) Metals, specifically chromium, copper, lead, mercury, thallium and zinc; and,
- Percent Solids.

2.2 GROUNDWATER SAMPLING PROGRAM

The groundwater investigation program involved the collection of 5 groundwater samples from select existing monitoring wells at the terminal as follows:

Sample ID	Monitoring Well	Sampling Date
PNO-MW-14A-091900WG1	MW-14	09/19/00
PNO-MW-12SB13-091900WG1	MW-12	09/19/00
PO-MW05-042002WG01	MW-05	04/20/02
PO-MW11-042002WG01	MW-11	04/20/02
PO-MW14-042302WG01	MW-14	04/23/02
PNCT-MW11-053102	MW-11	05/31/02

Groundwater samples were collected via low-flow sampling techniques according to the following procedure:

- 1. Wearing the appropriate PPE, open the monitoring well and screen the headspace of the well using a PID to determine if VOCs are present.
- 2. Measure the static water level in the monitoring well from top of inner casing using an electronic water level meter. Minimize the disturbance to the water column.
- 3. Check for free product or sheen floating on water surface in the well.

- 4. Carefully lower the low-flow pump into the water column until the intake of the pump is in the middle of the saturated section of the screen. Minimize disturbance to the water column.
- 5. Purge the well using a low flow rate (<0.5 1/min) until indicator parameters (i.e., pH, conductivity, dissolved oxygen, etc.) have stabilized. Drawdown in the well should not exceed 0.3 foot.
- 6. Without stopping the pump, collect groundwater samples using same flow rates as established during purging.
- 7. Fill sample bottles directly from the pump discharge tubing. VOC sample vials will be filled first, then remaining sample bottles.
- 8. Label the samples and record sampling information in the field book.
- 9. Place labeled samples in a cooler with ice. A trip blank will be maintained in the cooler during each sampling day.
- 10. Complete the chain of custody form and ship samples to the laboratory for analysis.

The submersible pump used for groundwater sampling was decontaminated prior to use on each well according to the following procedure:

- 1. Manually wash the outside of the pump using non-phosphate detergent and potable water.
- 2. Rinse the outside of the pump using potable water.
- Flush the pump with 20 gallons of potable water by pumping the water through the housing and tubing.
- 4. Rinse the exterior housing with distilled/deionized water.
- 5. Repeat this procedure between each use of the pump.
- 6. Collect the rinsate from the pump decontamination in drums for disposal.

Dedicated teflon-lined tubing was used for sampling each well.

MW-14 was purged and sampled using a polypropylene bailer since the pump control box malfunctioned. MW-14 was purged by carefully lowering the bailer into the well, and removing groundwater from the well. Water quality parameters including pH, turbidity, conductivity, temperature, dissolved oxygen and oxidation-reduction potential were measured during this process. Groundwater samples were collected for MW-14 after parameter stabilization by transferring water directly from the bailer into the sample bottles. This sampling technique is considered to yield accurate analytical results, similar to what might be obtained by sampling directly from a pump discharge. Groundwater samples were analyzed for metals, including antimony, arsenic, lead and thallium, by EPA Method 200.7.

3.0 RESULTS

3.1 SOIL SAMPLING RESULTS

The analytical results for soil samples were compared to NJDEP's "Soil Cleanup Criteria (mg/kg)", dated 5/12/99 and available through the NJDEP's website (http://www.state.nj.us/dep/srp/regs/guidance.htm). The criteria on the list include the following:

- Residential Direct Contact;
- Non-Residential Direct Contact; and,
- Impact to Groundwater.

Twenty soil samples, plus appropriate QA/QC samples, were collected from twenty soil borings. Samples were submitted to Hampton-Clarke, Inc., Veritech Laboratories of Fairfield, New Jersey for analysis. The soil samples were analyzed for the following parameters:

- Polynuclear Aromatic Hydrocarbons (PAHs);
- Polychlorinated Biphenyls (PCBs);
- Select Target Analyte List (TAL) Metals, specifically chromium, copper, lead, mercury, thallium and zinc; and,
- · Percent Solids.

A posting map depicting sample locations where sample concentrations exceed criteria is provided as Figure 1.

3.1.1 Polynuclear Aromatic Hydrocarbons (PAHs)

The following soil samples were analyzed for selected polynuclear aromatic hydrocarbons (PAHs) by EPA SW-846 Method 8270:

```
PO-BH14A (1.5-2)
PO-BH14B (1.5-2)
PO-BH14C (1.5-2)
PO-BH14D (1.5-2)
```

PO-BH14E (1.5-2)

PO-BH14F (1.5-2)

PO-BH14F (1.5-2)

PO-BH14G (1.5-2)

PO-BH14H (1.5-2)

A summary of the PAHs detected in the soil samples is presented in Table 3-1.

The concentration of benzo(a)anthracene detected in the following samples exceeded the residential direct contact soil cleanup criterion (RDCSCC) of 0.9 mg/kg, the most stringent criterion for benzo(a)anthracene:

Sample	Concentration Detected (mg/kg)
PO-BH14A (1.5-2)	2
PO-BH14B (1.5-2)	3.7
PO-BH14C (1.5-2)	14
PO-BH14D (1.5-2)	4.4
PO-BH14E (1.5-2)	2
PO-BH14G (1.5-2)	0.91
PO-BH14H (1.5-2)	2.4

The concentration of benzo(b)fluoranthene detected in the following samples exceeded the RDCSCC of 0.9 mg/kg, the most stringent criterion for benzo(b)fluoranthene:

Sample	Concentration Detected (mg/kg)
PO-BH14A (1.5-2)	2.9
PO-BH14B (1.5-2)	4
PO-BH14D (1.5-2)	5.7
PO-BH14E (1.5-2)	1.8
PO-BH14G (1.5-2)	1.1
PO-BH14H (1.5-2)	3

The concentration of benzo(k)fluoranthene detected in the following samples exceeded the RDCSCC of 0.9 mg/kg, the most stringent criterion for benzo(k)fluoranthene:

Sample	Concentration Detected (mg/kg)
PO-BH14A (1.5-2)	1.5
PO-BH14B (1.5-2)	3.1
PO-BH14C (1.5-2)	30
PO-BH14D (1.5-2)	3.6
PO-BH14E (1.5-2)	1.1
PO-BH14H (1.5-2)	1.4

The concentration of benzo(a)pyrene detected in the following samples exceeded the RDCSCC and non-residential direct contact soil cleanup criterion (NRDCSCC), both 0.66 mg/kg and the most stringent criteria for benzo(a)pyrene:

Sample	Concentration Detected (mg/kg)
DO DIII 44 (1.5.0)	1.0
PO-BH14A (1.5-2)	1.9
PO-BH14B (1.5-2)	3
PO-BH14C (1.5-2)	11

PO-BH14D (1.5-2)	3.8
PO-BH14E (1.5-2)	1.3
PO-BH14G (1.5-2)	0.81 J
PO-BH14H (1.5-2)	1.7

J indicates the concentration of the compound is estimated

3.1.2 Polychlorinated Biphenyls

The following soil samples were analyzed for polychlorinated biphenyls (PCBs) by EPA SW-846 Method 8082:

PO-BH14A (1.5-2) PO-BH14B (1.5-2) PO-BH14C (1.5-2) PO-BH14D (1.5-2) PO-BH14E (1.5-2) PO-BH14F (1.5-2) PO-BH14G (1.5-2) PO-BH14H (1.5-2)

PCB Aroclors, including Aroclor 1242 and 1260, were detected in soil samples above the Soil Cleanup Criteria. Each of the individual aroclors was compared to the criteria for total PCBs.

The concentration of Aroclor 1242 detected in the following samples exceeded the RDCSCC of 0.49 mg/kg, the most stringent criterion for total PCBs:

Sample	Concentration Detected (mg/kg)
PO-BH14A (1.5-2)	2.3
PO-BH14B (1.5-2)	8.2
PO-BH14C (1.5-2)	4
PO-BH14D (1.5-2)	6.1
PO-BH14E (1.5-2)	2.2
PO-BH14F (1.5-2)	1.7
PO-BH14G (1.5-2)	0.96
PO-BH14H (1.5-2)	5.9

The concentration of Aroclor 1260 detected in the following samples exceeded the RDCSCC of 0.49 mg/kg, the most stringent criterion for total PCBs:

<u>Sample</u>	Concentration Detected (mg/kg)
PO-BH14A (1.5-2)	2
PO-BH14B (1.5-2)	6.2
PO-BH14C (1.5-2)	3.3

PO-BH14D (1.5-2)	4.9
PO-BH14E (1.5-2)	11
PO-BH14F (1.5-2)	4.4
PO-BH14G (1.5-2)	6.4
PO-BH14H (1.5-2)	6.5

3.1.3 TAL Metals

The following soil samples were analyzed for select metals including chromium, copper, lead, thallium and zinc by EPA SW-846 Method 6010 and Mercury by EPA SW-846 Method 7471A, as indicated:

Sample ID	<u>Analytes</u>
PO-BH02A-090800	Chromium, Thallium, Zinc
PO-BH02B-090800	Chromium, Thallium, Zinc
PO-BH02C-090800	Chromium, Thallium, Zinc
PO-BH02D-090800	Chromium, Thallium, Zinc
PO-BH02E-090800	Chromium, Thallium, Zinc
PO-BH13A-090700	Chromium
PO-BH13B-090700	Chromium
PO-BH13C-090700	Chromium
PO-BH13D-100300	Chromium
PO-BH13E-100300	Chromium
PO-BH14A (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14B (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14C (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14D (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14E (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14F (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14G (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14H (1.5-2)	Copper, Lead, Mercury, Zinc

The concentrations of chromium detected in soil were compared to the soil cleanup criteria for the trivalent form of chromium. The only criterion for trivalent chromium is the RDCSCC of 120,000 mg/kg. No soil samples exceeded the RDCSCC for chromium.

The concentration of copper detected in the following samples exceeded the residential RDCSCC and NRDCSCC, both 600 mg/kg and the most stringent criteria for copper:

<u>Sample</u>	Concentration Detected (mg/kg)
PO-BH14B (1.5-2)	3,500
PO-BH14D (1.5-2)	1,200
PO-BH14E (1.5-2)	720

The concentration of lead detected in the following samples exceeded the RDCSCC of 400 mg/kg, the most stringent criterion for lead:

Sample	Concentration Detected (mg/kg)
PO-BH14A (1.5-2)	8,000
PO-BH14B (1.5-2)	2,800
PO-BH14C (1.5-2)	1,700
PO-BH14D (1.5-2)	2,500
PO-BH14E (1.5-2)	35,000
PO-BH14F (1.5-2)	2,900
PO-BH14G (1.5-2)	810
PO-BH14H (1.5-2)	2,500

The concentration of mercury detected in the following samples exceeded the RDCSCC of 14 mg/kg, the most stringent criterion for mercury:

Sample	Concentration Detected (mg/kg)
DO DIII 4D /1 5 0)	
PO-BH14B (1.5-2)	38
PO-BH14C (1.5-2)	18
PO-BH14E (1.5-2)	19

The concentration of zinc detected in the following samples exceeded the RDCSCC and NRDCSCC, both 1,500 mg/kg and the most stringent criteria for zinc:

Sample	Concentration Detected (mg/kg)
DO DITIAD (1.5.2)	2 200
PO-BH14B (1.5-2)	3,300
PO-BH14D (1.5-2) PO-BH14F (1.5-2)	2,100 1,800
PO-BH14H (1.5-2)	10,000
1 0-10(11411 (1.3-2)	10,000

3.2 GROUNDWATER SAMPLING RESULTS

The analytical results for groundwater samples were compared to NJDEP's "Groundwater Quality Standards N.J.A.C 7:9-6, Table 1 – Specific Ground Water Quality Criteria – IIA and Practical Quantitation Levels" (GWQS), available through the NJDEP website (http://www.state.nj.us/dep/srp/regs/guidance.htm). Detected concentrations of analytes in the groundwater were compared to the criteria provided in the GWQS Table 1 column entitled "Higher of PQLs and Ground Water Quality Criteria"

Six groundwater samples, including one duplicate, were collected from four monitoring wells including MW-05, MW-11, MW-12 and MW-14. MW-12 and MW-14 were sampled on September 19, 2000. MW-5 and MW-11 were sampled on April 20, 2002 and MW-14 was resampled on April 23, 2002. MW-11 was also sampled again on May

31, 2002. The groundwater samples were analyzed for metals, including antimony, arsenic, lead and thallium, by EPA Method 200.7.

Table 3-2 presents the analytical results for groundwater samples collected during September 2000, April 2002 and May 2002. At the completion of the groundwater sampling, no parameter exceeded the applicable NJDEP GWQS.

Table 1 Summary of Soil Sampling Program Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Location ID	Collected by	Site	Date
SB-1	Excel	Metro Metals	6/23/1999
SB-2	Excel	Metro Metals	6/23/1999
\$B-3	Excel	Metro Metals	6/23/1999
SB-4A ¹	Excel	Metro Metals	6/24/1999
SB-4B ¹	Excel	Metro Metals	6/24/1999
SB-5A	Excel	Metro Metais	6/23/1999
SB-5B	Excel	Metro Metals	6/23/1999
SB-5C	Excel	Metro Metals	6/23/1999
SB-5D	Excel	Metro Metals	6/25/1999
SB-5E	Excel	Metro Metals	6/23/1999
SB-5F	Excel	Metro Metals	6/25/1999
MW-C1	PA	Metro Metals	6/23/1999
MW-C2	PA	Metro Metals	6/22/1999
MW-C3	PA	Metro Metals	6/23/1999
MW-C4	PA	Metro Metals	6/23/1999
MW-C5	PA	Metro Metals	12/5/2001
PA-C6	PA	Metro Metals	6/ <u>2</u> 4/1999
PA-C7	PA	Metro Metals	6/24/ <u>1</u> 999
BH-N6	PA	Metro Metals	10/2/2000
BH-N7	PA	Metro Metals	10/2/2000
BH-N5A	PA	Naporano	8/25/1999
BH-N5B	PA	Naporano	8/27/1999
BH-N5C	PA	Naporano	8/27/1999
BH-N5D	PA	Naporano	8/27/19 <u>9</u> 9
BH-N5F	PA PA	Naporano	8/11/2001
BH-N1	PA	Naporano	8/25/1999
MW-N2	PA	Naporano	8/27/1999
PA-C6- <u>E1</u>	PA	Metro Metals	12/3/2001
PA-C6-E2	PA	Metro Metals	12/5/2001
PA-C6-E3 ²	PA	Metro Metals	12/7/2001
PA-C6-E3A ²	PA	Metro Metais	12/11/2001
PA- <u>C6-E4</u>	P <u>A</u>	Metro Metals	12/11/2001
PA-C6-E5	PA	Metro Metals	4/29/2002
PA-C6-E6	PA	Metro Metals	4/29/2002

Table 1 Summary of Soil Sampling Program Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Location ID	Collected by	Site	Date
PA-C6-E7	PA	Metro Metals	4/29/2002
PA-C6-E8	PA	Metro Metals	4/29/2002
PA-C6-E9	PA	Metro Metals	5/16/2002
PA-C6-E10	PA	Metro Metals	5/16/2002
PA-C6-E11	PA	Metro Metals	5/16/2002
PA-C6-N1	PA	Metro Metals	12/3/2001
PA-C6-N2	PA	Metro Metals	12/5/2001
PA-C6-N3	PA	Metro Metals	12/7/2001
PA-C6-W1	PA	Metro Metals	12/3/2001
PA-C6-W2	PA	Metro Metals	12/5/2001
PA-C6-W3	PA	Metro Metals	12/7/2001
PA-C6-S1	PA	Metro Metals	12/3/2001
PA-C6-\$2	PA	Metro Metals	12/5/2001
PA-C6-S3	PA	Metro Metals	12/7/2001
PA-C6-S4	PA	Metro Metals	12/11/2001
PA-C6-S5	PA	Metro Metals	4/29/2002
PA-C6-S5A	PA	Metro Metals	4/29/2002
PA-C6-S6	PA	Metro Metals	4/29/2002
PA-C6-S7	PA PA	Metro Metals	4/29/2002
PA-C7-N1	PA	Metro Metals	12/4/2001
PA-C7-S1	PA	Metro Metals	12/4/2001
PA-C7-E1	PA	Metro Metals	12/4/2001
PA-C7-W1	PA	Metro Metals	12/4/2001
BH-N1-N1	PA	Naporano	12/4/2001
BH-N1-W1	PA	Naporano	12/4/2001
BH-N1-S1	PA	Naporano	12/4/2001
8H-N1-E1	PA	Naporano	12/4/2001
MW-C5-N1	PA	Metro Metals	12/5/2001
MW-C5-W1	PA	Metro Metals	12/5/2001
MW-C5-S1	PA	Metro Metals	12/5/2001
MW-C5-E1	PA	Metro Metals	12/5/2001

Notae:

PA - Port Authority

^{1 -} SB-4A and SB-4B from same location

² - PA-C6-E3 and PA-C6-E3A from same location. Excel - Excel Environmental Resources, Inc.

FIGURES

TEGEND

NUBEP New Jersey Department of Environmental Protection maying whileparts per full protection maying whileparts per full protection of parts per million.

U. Not elegated at the POL.

J. Analytic identiced below POL and/or estimated concentration.

N. Not. Available

Shadad value exceeded the NJDEP residential soil deemup criteria.

Bridged value exceeded the NJDEP impact to ground value soil cleanup criteria.

Summary of Yolattle Origidatic Compounts Soil Sampling Results Naporand and Hugo Neu Facilities Port Newark Naporand Results	
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ا ا	0.88 U	063 U	0.50 U	0.65 U	0.63 U	0630	ĺ	0.55 U	0.60	0.53 U	0.63 U	0.65 U	080	N.	Z	NA.	75-69-4	Trichlorofluoromethane
	0.88 0	0.63 U	0.58 U	0.85 U	0.63 U	0 63 U	0.63 U	0.55 U	060	0.63 U	0.63 U	0.85 U	O de C	54	23	1	79-01-6	Trichlaroethene
ام	0.68 U	0.63 U	0.58 U	0.65 U	0.63 U	0.63 U	0.63 ∪	0 55 U	_08U	0.63 U	0.63 U	0.85 ∪	0.6 U	\$		1	1.0061-02-6	trans-1.3-Dichloropropene
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إ	0.68 U	0.63 U	0.58 U	0.65 U	0.63 ∪	0.63 (0.63 U	0.55 ∪	080	0.63 U	0.63 U	0.65 U	0.60	- 3	,	1	127-18-4	Tetrachloroethene
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ا	0 14 0		0.12	0130	013 0	0 13 U	0130	D11 U	0 12 U	D.13 U	0 13 U	0130	0120	NA	NA	N.	1834-04-4	Methyl-t-butyl ether
	0.35		0230	0.26 U	0.25 U	0.25 U	0.25 U	0.22 U	0 18 J	0.25 U	0.25 U	0.26 U	0.24 U	1000	410	67	108-38-3	M&P-Xylenes
	0.14 U	I	0.12.0	0.13 U	0.13 U	0 13 U	013 U	0110	0.12 U	0 13 U	0.13 U	0.13 U	0 12 U	1000	1000	100	1.1-0d:	Emylbenzene
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J	0.88 U	Į	0 66 U		0.63 L	0.83 U	0.63 U	0.55 U	060	0.63 0	0.63 U	0 65 0	080	46	11	4	75-27-4	Bromodichloromethane
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Ţ	145		12 [130	120	120	110	1.2 U	1.2 U	1.2 U	.30	120	5	-1		107-13-1	Acrylonitrile
	2 4		172	Ì	19 0	190	1.9 U	1.6 U	1.8 U	1.90	1.9 U	1.9 (18 0	₹	X.	NA.	107-02-8	Acrolein
Ī	30	2.5 U	230		2.5 U	25 U	2.5 U	2.2 U	24 U	2.5 U	2.5 ∪	280	2.4 U	1000	1000	700	67-64-1	Aceione
Ī	27 0		23 U	1	2.5 U	250	2.5 ∪	2.2 U	240	2.5 U	250	260	240	1000	1000	8	100	4-Mighyl-2-Pentagone
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	0.68 U	П	0.88.0		0.63 U	0830	0.63 U	0.55 U	0.6 U	0.63 U	0.63 U	0.85 U	0.6 U	24	6	1	107-06-2	1,2-Dichloroethene
	0.60 U		0.58 (0.63 U	0.63 C	D 63 U	0.55 ∪	0.8 U	0.63 U	0.63 U	0.65 U	060	10000	5100	50	85-50-1	1,2-Dichlorobenzana
	U 88 U	- 1	0.58 U		0 63 U	0.63 (063 U	0 55 U	D 8 U	0 63 0	0 63 U	0.65 U	0.8 U	159	8	ŏ	75-35-4	1.1-Dichlordelhens
	0.68 U		0.58 U		0.63 ∪	0.83 U	0.63 U	0 55 U	060	0.63 (/	0830	0.65 U	080	1000	570	10	75-34-3	1,1-Dichlorosthane
1	0.68 U	П	0.50 U		063 U	0 63 U	0.63 U	0.55 U	0.5 U	0.63 U	0.63 U	065 U	0.6 U	420	22		79-00-5	1,1,2-Trichigroethane
	0.68 (0.58 U		0 63 U	0 63 U	0.63.0	0.55 U	080	D 63 U	0 63 U	0 65 U	0.6 U	70	34	_	79-34-5	1,1,2,2-Tetrachloroethans
	0.88 U		0.58 ∪		0690	0.63 U	0 63 U	0.55 U	080	0.63 U	063 U	0 85 0	060	1000	210	8	71-55-6	1,1-Trichloroethane
	mg/kg		mg/kg	Г	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/lig	pilgm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	Number	Unites:
6/25	6/22/1999		6/Z3/1999		8/25/1999	9/2/1999	9/2/1989	9/1/1899	9/2/1999	977/1999	8/27/1999	8/27/1999	8/27/1999	Soil Cleanup Criteria	Soil Cleanup Criteria	Soil Cleanup Orteria	C.A.S	Sampling Date:
2	AA90327		AA90433		AASA149	AA94662	AA34657	AA94666	AA94655	AA94745	AA94328	AA84325	AAS4324	Direct Contact	Direct Contact	Groundwatar	-	Veritech Sample (D:
_	1		1.5-2.0	10-15	0.F1.6	Ę	Z A	6.0-8.0	0.5-2.0	Z,	Z.	4.2-5.0	O. I.	Non-Residential	Residentia	an Deact to	_	Sampling Depth (%)
V.	104 C2 5 1	1	MW.C1 S-1		RH-N1	H 95	TB 9/2	BE-255	101-10F	T-BLANK 9/7	TB 1/27	LIW.N2	1 N N N N N N N N N N N N N N N N N N N	Z Z	Z.DEP	ALDED		Citage Barrinja II).

1015

Soit Data 9-18-02.xls

Client Sample ID:		NJDEP Impact to	NJDEP	NJDEP	MW-C2 \$-4	MW-C3 5-1	MW-C3 S-4	MW-C4 S-1	MW-C4 S-3	MW-C5 S-1	MW-C5 S-5	PA-C6 S-1	PA-C6 S-5	PA-C7 S-1	PA-C7 S-5	8H-N6	BH-N7
Sampling Depth (ft)	1	Groundwater	Residential	Non-Residential	6-7	1.6-2.0	8-7	1.5-2.0	5-5.5	1-2	8-8.5	0-1	8-8.5	0-1	8-8.5	00.0-0.5	0.0-0.5
Veritech Sample ID:		Soll Cleanup	Direct Contact Soil	Direct Contact Soil	AA90328	AA90435	AA90438	AA90437	AA90438	AA90531	AA90532	AA90533	AA90534	AA90535	AA90538	AB16085	AB16088
Sampling Date:	CAS	Criteria	Cleanup Criteria	Cleanup Criteria	6/25/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	10/2/2000	10/2/2000
Units:	Number	mg/kg	rng/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ma/ka	mg/kg
Aldrin	309-00-2	50	0.04	0 17	0.0035 U	- 4.035	0.0037 U	0.078 U	0.007B U	生态0:18 次集	0.0035 U	0.017 U	0.0078	Ç. 0.647.	0.0034 U	0.071 U	0.18 U
Alpha-BHC	319-84-6	NA	NA .	NA NA	0.0035 U	0.018 ∪	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Beta-BHC	319-85-7	NA	NA_	NA NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.07	0.0034 U	NR	NR
Chlordane	57-74-9	NΑ	NA NA	NA _	0.0071 U	0.037 U	0.0073 ∪	0 16 U	0.016 U	0,036 U	0.0071 U	0.035 U	0.0071 U	0.035 U	0.0069 U	NR NR	NR
	319-86-8	NA	NA .	NA .	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 Ū	0.0035 U	0.018 U	0.0034 U	NR	NR
	60-57-1	50	0.042	0.18	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.02	0.0035 ∪	0.01 <u>7</u> U	0.0035 U	0.018 U	0.0034 U	0.071 U	之 年 0.25 中心
	959-98-8	50	340	6200	0.0035 U	0.018 U	0.0037 U	0 078 U	0.0078 U	0.018 U	0.0035 U	0.017 ⊔	0.0035 U	0.018 U	0.0034 U	NR	NR
	3213-65-9	50	340	6200	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018	0.0035 U	0.D17 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endosulfan Sulfate 1	1031-07-8	NA	NA NA	NA	0.0035 U	0.25	0.0037 U	0.078 U	0.0078 U	0.1	0.0035 U	0.017 U	0.0035 U	0.018 U	0.003 <u>4</u> U	NR	NR
Endri <u>n</u>	72-20-8	50	17	310	0.0035 U	0.018 U	0.0037 U	0.078 U	0.007B U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endrin Aldehyde 7	7421-93-4	NA _	NA I	NA NA	0,0035 U	0.031	0.0037 U	0.41	0.0078 U	0.018 U	0.0035 U	0.017 L	0.0035 U	0018U	0.0034 ∪	NR	NR
Endrin Ketone 5	3494-70-5	NA	NA	NA NA	0.0035 U	0.0 <u>18</u> U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Gamma-BHC	58-89-9	NA	0.52	2.2	0.0035 U	0.075	0.0037 U	0.078 U	0.0078 U	0.041	0.0035 U	0.017 U	0.0035 ∪	0.018 U	0.0034 U	NR	NR
Heptachior	76-44-8	50	0 15	0.65	0.0035 LI	- 0.25 - F	0.0037 U	2021汽车	0.017	0.14	0.0035 U	0.017 U	0.0066	0.036	0.0034 U	0.071 U	0.18 U
Heptachlor Epoxide 1	1024-57-3	NA	NA	NA _	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.D18 U	0.0035 U	0.017 U	0.0035 U	0.018 U	D.0034 LJ	NR	NR
Methoxychior	72-43-5	50	280	5200	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
P.P'-00D	72-54-8	50	3	12	0.0035 U	0.018 U	0.0037 U	0.078 U	0.011	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 ป	0.0034 U	NR	NR
P.P'-DOE	72-55-9	50	2	9	0.0035 U	0.067	0.0037 U	16	0.036	0.048	0.0035 U	0.017 U	0.0035 U	0.027	0.0034 U	NR	NR
	50-29-3	500	2	9	0.0035 U	0.063	0.0037 U	1.4	0.034	0.033	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Toxaphene 8	8001-35-2	50	01	0.2	0.03 U	0 18 U	0.037 U	078 U	0.078 U	0 18 U	0.035 U	0 17 U	0 035 Ū	0.18 U	0.034 U	NR	NR T

Notes:

NJDEP - New Jersey Department of Environmental Protection mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria
Value exceeded the NJDEP non-residential soil cleanup criteria
Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria

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Client Sample ID:		NJDEP Impact to	NJDEP	NJDEP	MW-N2	MW-N2	BH-N5F	BH-N5F	BH-N1	BH-N1	MW-C1 S-1	MW-C1 S-2	MW-C2 S-1
Sampling Depth (ft)		Groundwater	Residential	Non-Residential	0.5-1.5	4.5-5.0	0.5-2.0	6.0-B.0	0.5-1.5	4.0-4.5	1,5-2,0	3-3.5	1-2
Ventech Sample ID:	1	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	AA94324	AA 94325	AA94655	AA94656	AAP4149	AA94150	AA90433	AA90434	AA90327
Sampling Date:	CAS	Criteria	Cleanup Criteria	Cleanup Criteria	8/27/1999	N27/1999	9/2/1399	9/2/1999	8/25/1999	8/25/1999	6/23/1999	8/23/1999	6/22/1999
Units:	Number	mq/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aldrin	309-00-2	50	0.04	0.17	*#*O'Be**	0.015	0.057		- 40 0.38 H	0.0035 U	0.032	0.014	0.01 U
Alpha-BHC	319-84-6	NA NA	NA NA	NA NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Beta-BHC	319-85-7	NA NA	NA NA	NA NA	0.018 U	0,0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Chlordane	57-74-9	NA.	NA	-NA	0.035 U	0.0069 U	0.069 U	0.0069 U	0 14 U	0.0069 U	0.0067 U	0.0071 U	0.03 U
Delta-BHC	319-86-8	NA	NA .	NA NA	0.018 ∪	0.0035 U	0.035 U	0.0035 ປ	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Dieldrin	60-57-1	50	0.042	0.18	0.018 U	0.0035 U	0.035 U	0.036	0.072 ป	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endosulfan I	959-98-8	50	340	6200	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 ป	0.01 U
Endosulfan II	33213-65-9	50	340	6200	0.073	0.0081	0.035 U	0.016	0.3	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endosulfan Sulfate	1031-07-8	NA.	NA	NA NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 ↓
Endrin	72-20-8	50	17	310	0.16	0.013	0.056	0.0035 U	0 072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endrin Aidehyde	7421-93-4	NA	NA NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 ∪	0.072 U	0.0035 U	0.0041	0.0035 U	0.01 U
Endrin Ketone	53494-70-5	NA_	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0062	0.0035 U	0.01 U
Gamma-BHC	58-89-9	NA	0.52	2.2	0.018 U	0.0035 U	0.035 U	0.021	0.072 U	0.0035 ป	0.007	0.0035 U	0.01 U
Heptachlor	76-44-8	50	0.15	0.65	0.018 U	0.0035 U	0.035 U	0.0035 U	A: 5-034%	0.0035 U	0.023	0.0086	0.1
Heptachlor Epoxide	1024-57-3	NA	NA .	NA .	0.018 U	0 0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Methoxychlor	72-43-5	50	280	5200	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.29
P,P'-DDD	72-54-8	50	3	12	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0025 U	0.0034 U	0.0035 U	0.01 U
P.P'-DDE	72-55-9	50	2	9_	0.097	0.0035 U	0.035 U	0.0035 U	0.34	0.0035 U	0.0074	0.0035 U	0.61 LL
P,P'-DOT	50-29-3	500	2	9	0.018 U	0.0035 じ	0.035 U	0.0035 <u>Ū</u>	0.44	0.0035 U	8800.0	0.0035 U	0.01 U
Toxaphene _	8001-35-2	50	01	0.2	0 18 U	0 035 U	0.35 U	0.035 U	0 72 Ū	0.035 U	0.034 Ü	0.035 U	0 19 U

NJDEP - New Jersey Department of Environmental Protection mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup critera Value exceeded the NJDEP non-residential soil deanup criteria Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria

> Page 1 of 2 Soil Data 9-18-02.xls

Table 4 Summary of PCB Soll Sampling Results Neporano Neu Facilities Port Newerk Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Retidential Direct Contact Soll Cleanup Criteria mg/kg	SB-4A 1.0-1.5 1-1.5 AA90524 6/24/1999 mg/kg	SB-4A 5.5-6 5.5-8 AA90525 6/24/1999 mg/kg	S8-4B 0.5-1 0.5-1 AA90526 6/24/1899 mg/kg	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999 mg/kg	8H-N6 00.0-0.5 AB16065 10/2/2000 mg/kg	BH-N7 0.0-0.5 AB16066 10/2/2000 mg/kg
Aroclor-10:6	12674-11-2	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	0.035 U	0 18 U
Aroctor-1221	11104-28-2	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 ロ	NR	NR
Araclar-1232	11141-16-5	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	NR	NR
Aractor-1242	53469-21-9	50	0.49	2	0.035 U	0.034 U	0.37 ⊔	0.035 U	NR	NR
Aroclor-1248	12672-29-6	50	0.49	2	0.96	0 034 U	Walter 15 2000	0.035 U	0.035 U	0 18 U
Aroclar-1254	11097-69-1	50	0.49	2	0.48	0.034 U	*ee 5:5.9	0.035 U	0.74	0.18 U
Aracior-1250	11096-82-5	50	0.49	2	0.035 U	0.034 U	0 37 U	0 035 U	0.035 U	Sec 2 7 64

NJDEP - New Jersey Department of Environmental Protaction mg/Kg · Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

Analyte delected below PQL and/or estimated concentration

NR - Analysis Not Requested

[1] Analysis Not Requested the NJDEP residential soil cleanup standard. Value exceeded the NJDEP residential and non-residential soil cleanup standards. Boilded value exceeded the NJDEP impact to groundwater deanup standard.

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Table 4 Summery of PCB Soil Sampling Results Naporano Neu Facilities Port Newark Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample iD: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soll Cleanup Criteria mg/kg	Residential	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5C 2-2.5 2-2.5 AA90516 6/23/1999 mg/kg	SB-5C 3.5-4 3.5-4 AA90517 6/23/1999 mg/kg	SB-5D 0-0.5 0-0.5 AA90528 8/26/1999 mg/kg	38-5D 3.5-4 1,5-4 AA90529 6/25/1999 mg/kg	SB-5E 0.5-1 0.5-1 AA9051B 6/23/1999 mg/kg	SB-5E 2.5-3 2.5-3 AA90519 6/23/1999 mg/kg	SB-5E 6-6.5 6-6.5 AA90520 6/23/1999 mg/kg	SB-5E 9.5-10 9.5-10 AA90521 6/23/1999 mg/kg
Aracior-1016	12674-11-2		0.49	2	0,36 U	0.035 U	0.17 Ú	0.035 Ú	0.36 U	0.37 U	0.038 U	0 035 U
Araclor-1221	11104-28-2	50	0.49	2	0 36 U	0.035 U	0.17 U	0 035 U	0.36 U	0.37 U	0.038 U	0.035 U
Acoclar-1232	11141-16-5	50	0.49	2	0.36 ∪	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	_0.035_U
Arocier-1242	53469-21-9	50	0.49	2	0.36 U	0.035 U	0 17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Aroclor-1248	12672-29-6	50	0.49	2	# 28.3 YE	0.035 U	4.83		247 A. Z. Z. S. Z.		0.2	0 035 U
Aroclor-1254	11097-69-1	50	0.49	2	·中国基础及是188	0.035 U	. 一篇相对他	0.59	×5.0		0 34	0.035 ∪
Aroclor-1260	11096-82-5	50	0.49	2	0.36 U	0.035 U	0.17 U	0.035 U	0.36 U	2 6.3	0.038 U	0.035 D

NJDEP - New Jersey Department of Environmental Protection mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U Not detected at the PQL

Analyte detected below PQL and/or estimated concentration

Analysis Not Requested

Analysis Not Requested

Value exceeded the NJDEP residential and non-residential soil cleanup standard

Value exceeded the NJDEP impact to groundwater deanup standard

Bolded value exceeded the NJDEP impact to groundwater deanup standard

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Table 4
Summary of PCB Soil Sampling Results
Naporano Neu Facilities
Port Newark
Newark, New Jersey

	Ī	NJOEP Impact to	NUDEP	NJDEP	MW-N2	MW-N2	BH-NSF	BH-NSF	8H-N-1	EX-FIG	MW-C1 S-1	MW-C1 S-2	MW-C2 S-1	MW-C2 5-4	MW-C3 S-1	MW-C3 S-4
		Groundwater	Residential	Non-Residential	0.5-1,5	4.5-5.0	0.5-2.0	0.0-0.9	0.4-1.5	4.04.5	1.5-2.0	3-3.5	1-2	6-7	1.5-2.0	6-7
		Soil Cleanup	Direct Contact Soil Direct Contact Soil	Direct Contact Soil	AA94324	AA94325	AA94655	AA94656	AAS4149	AA94150	AA90433	AA80434	AAB0327	AA90328	AA90436	AA90436
	CAS	Criteria	Cleanup Critisria	Cleanup Criteria	8/27/1999	8/27/1999	9/2/1899	9/2/1899	8/25/1999	8/25/1999	6/23/1999	6/23/1999	6/22/1999	6/25/1999	8/23/1999	6/23/1999
ž	Number	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	πg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	шд/ка
1.26	2674-11-2	8	0.49	2	0.18 U	0.017 U	- 0.82 ·	A. 44.24	0.38 U	0.017 U	0 017 U	0.018 U	U 60.0	0.01 U	0.18 U	0.018 U
ŀΞ	1104-28-2	205	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	∩ 60°0	U 10:0	0.18 U	0.018 U
Ξ.	1141-16-5	20	0.49	2	0.18 ∪	0.017 U	U 710.0	0.087 ∪	0.36 ∪	0.017 U	0.017 U	0.018 U	n 60:0	0.01 U	0.18 U	0.018 U
	53469-21-9	80	0.49	2	0.18 U	0.017 U	U 710.0	0.087 U	0.36 U	0.017 U	U 210.0	0.018 U s	0.09 U	0.01 U	0.18 U	0.018 U
	12672-29-6	99	0.49	2	45 83 m	9.0	0.017 U	0.087 U	気を発	0.017 U	* 20 C B 10 - 14	0.29	14 2 8 S	Q.01 U	- 0 Table	0.018 U
Ξ	1097-69-1	20	0.49	2	-1425 AVE.	0.44	· 京 三 · · · · · · · · · · · · · · · · ·	18B 0 18 5	0.36 U	0.017 U	D.017 U	0.018 U	0.09 U	0.01 U	THE BASS	0.018 U
	1096-82-5	20	0.49	2	0.18 U	0.017 U	0.017 U	1 1 180°0 □	6.7	0.092	0.21	190.0	· 教 世紀 · 教	0.01 10	0 18 U	0.018 U
														1		

Notes:
NJDEP - New Jersey Department of Environmental Protection
mg/Kg - Miligrams per Kilograms, equivalent to parts per million

1. Analyte detected below PQL and/or estimated concentration.
1. Analyte Acetested below PQL and/or estimated concentration.
2. Analyte Acetested Acetested
2. Analyte accessed the NLDEP residential soil cleanup standard.
2. Analyte accessed the NLDEP residential and non-residential soil cleanup standard.
Bolded value exceeded the NLDEP mypact to groundwater cleanup standard.

page 1 of 5

Table 4 Summary of PCB Soil Sampling Results Naporano Neu Facilities Port Newark Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Data:	CAS	NJDEP Impact to Groundwater Soll Cleanup Criteria	NJDEP Residential Direct Contact Soil Cleanup Criteria	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria	MW-C4 S-1 1.5-2.0 AA90437 6/23/1999	MW-C4 S-3 5-5.5 AA90438 6/23/1999	MW-C5 5-1 1-2 AA90531 6/24/1999	MW-C5 S-5 8-8.5 AA80532 6/24/1999	PA-C6 S-1 0-1 AA90533 6/24/1999	PA-C6 S-5 8-8.5 AA90534 6/24/1999	PA-C7 S-1 0-1 AA90535 6/24/1999	PA-C7 S-5 8-8.5 AA90536 6/24/1999	SB1 2-2.5 2-2.5 AA90503 6/23/1999	SB1 0.5-1 0.5-1 AA90504 6/23/1999	SB2 1-1.5 1-1.5 AA90505 6/23/1999	SB2 3-3.5 3-3.5 AA90506 6/23/1999
Units:	Number	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg_	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arocior-1016	12674-11-2	50	0.49	2	1:9.U	0.019 U	0.18 U	0 018 U j	0.017 U	0.018 U	0.018 U	0.017 U	0.035 ∪	0.035 U	0.035 U	0.035 U
Aroctor-1221	11104-28-2	50	0.49	2	77 190	0.019 U	0.18 U	0.01B U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 ∪	0.035 U	0.035 LJ	0.035 U
Aroclor-1232	11141-16-5	50	0.49	2	- 1.9 U	0.019_U	0.18 U	0.018 U	0.017 Ú	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Aroclor-1242	53469-21-9	50	0.49	2	. 4 4.1.9.U	0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0 017 U	0.035 U	0.035 U	0.035 U	0.035 U
Aroclar-1248	12672-29-6	50	0.49	2	# 19 U		5.5 主持	0.018 U	0.017 U	0.12	÷0.87*µ₹3	0.017 U	0.035 以	510 PE 25 E	0.035 U	0.035 U
Aroclor-1254	11097-69-1	50	0.49	2	**************************************	×15-0	年度62.2 第三	0.018 U	0.017 U	0.018 U	032.a	0.017 U	0.035 ປ	ナバ 、佐竹 酒。作品・	0.035 U	0.035 U
Aroclor-1260	11096-82-5	50	0.49	2	444, 1,9.U	0.019 U	0 18 U	0:018 U	0.017 U	0.018 U	0.018 U	0 017 U	0.035 U	0 035 U	0.035 U	0.035 U

NJDEP - New Jersey Department of Environmental Protection mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup standard.

Value exceeded the NJDEP residential and non-residential soil cleanup standards

Boided value exceeded the NJDEP impact to groundwater cleanup standard.

Page 2 of 5 Soil Data 9-18-02 xls

Table 4 Summary of PCB Soil Sampling Results Naporano Neu Facilities Port Newark Newark, New Jersey

Client Sample ID:		NJDEP Impact to	NJDEP	NJDEP	SB3 1-1.5	SB3 3-3.5	SB-5A 0-0.5	SB-5A 1.5-2	SB-5A 2.5-3	SB-5A 6.5-7	\$8-5B 0-0.5	SB-5B 2.5-3	SB-5B 7-7.5
Sampling Depth (ft)		Groundweter	Residential	Non-Residential	1-1.5	3-3.5	0-0.5	1.5-2	2.5-3	6.5-7	0-0.5	2.5-3	7-7.5
Veritech Sample ID:	1	Spil Cleanup	Direct Contact Soll	Direct Contact Soil	AA90507	AA90508	A490509	AA90510	AA90511	AA90512	AA90513	AA90514	AA90515
Sampling Date:	CAS	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	5/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999
Units:	Number	mq/kg	mg/kg	ma/ka	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	rng/kg
Aroclor-1016	12674-11-2		0.49	2	0.034 U	0.035 U	0 18 U	0 18 U	0.0 <u>34</u> U	0.036 U	0.36 U	0.38 Ü	0.035 U
Aroclor-1221	11104-28- <u>2</u>	50 _	0.49	2	0.034 U	0.035 U	0 18 U	0.18 U	0.034 U	0.0 36 U	0.36 U	0.38 U	0.035 U
Aroclor-1232	11141-16-5	50	0.49	2	0.034 U	0.035 U	0.18 U	0 18 U	0.034 U	0.036 U	0.35 🛭	0.38 U	0.035 U
Aroctor-1242	53469-21-9		0.49	2	0.034 U	0.035 U	0.18 U	0 18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1248	12672-29-6	50	0.49	2	0.034 U			ラセンスト 4.3 製造		0.036 U	** 127F.	· · · · · · · · · · · · · · · · · · ·	0.035 U
Aroclor-1254	11097-69-1	50	0.49	2	0.034 U		列起 21 小	1.9:	0.034 U	0.036 U	· 19.2 为分	THE PARTY SAME	0.035 U
Aroclor-1260	11096-82-5	50	0.49	2	0.034 U	g.035 U	0 18 U	0 18 U	0.034 U	0.036 U	0.36 U	D 38 U	0.035 U

NJDEP - New Jersey Department of Environmental Protection mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

Anlarysis not requested

4 Value exceeded the NJDEP residential soil cleanup standard

Value exceeded the NJDEP residential and non-residential soil cleanup standards

Bodded value exceeded the NJDEP impact to groundwater cleanup standard

Page 3 of 5

Summary of Semivolatile Organic Compounds Soll Sampling Results
Naporano and Hugo Neu Facilities
Port Newark
New Jersey

Control	t Sample ID: bling Depth (ft) ech Sample iD:		NJDEP Impact to Groundwater SOff Cleanup	NJOEP Retidential Duect Coefect Sall	NON-Residential Direct Contact Soll	8H-N7 0.0-0.5 AB46066
179-45-1	oling Date:	CAS	Criteria	Cleanup Criteria	Cleanup Criteria	10/2/2000
1000 1000	Trichlorobenzacie	130.12.4	901	89	1200	an an
March 100 10	chlorobenzene	95.50-1	8	5100	10000	N.
10.000 1.0000 1	chlorobenzene	547.73.1	100	570	10000	ž į
10,000 1	Trichlorophenol	96-96-4	90	2800	10000	XX
10,000 1,0	Trichlorophenol	68.06-2	10	29	270	£ 5
577.72	methylohenol	105.87.9	1	901	1000	ž
100 100	hibophenoi	51-28-5	10	10	2100	Z.K.
17.557.5 17.	nitrototuene	121-14-2	9			Z Z
1000 1000	vovaphthalene	10.56.7	. ≱	N.	• ≱	žŽ
1945/4	prophenol	95-57-8	40	280	5200	NA.
10000 1000	hyraphthelene	91.57.5	2	¥¥2	NA.	ž
1987.33 W. M. M. M. M. M. M. M. M. M. M. M. M. M.	nypriero	93-48-7	<u> </u>	2800	10000 NA	ž Ž
10544.5 104 105	phenol	88-75-5	¥,X	¥	NA	ZN.
10000 1000	ethylphenol	106-44-5	¥ .	2600	10000	¥2
1015552 157	schlarobenzidine	91-94-1	100	7 2	* ;	¥ 0
10,000 1	nitro-2-methylphenol	121:14-2	5 ₹	X	\$	ď.
19900 1990	nophenyl phenylether	161-55-3	Υ¥	Ā	AN	NR.
100001 10000 100	oro-3-methylphenal	29-89	8	0000;	10000	œ e
10,000 1	sconding chandather	70007	§ 3	10.7 T	6200	2 2
1,12,22	Muline	100-01-8	≨	¥	**	œ
1,22,49 1,50	phenol	100-02-7	¥¥.	ž	¥	E E
Control Cont	phithene	B3-32-9	\$ 5	3400	10000	0 0 0
1,000,000 1,00	primyene	200-007	\$ 6	2000	4000V	200
10 10 10 10 10 10 10 10	line	92.07.5	¥	NA NA	1	2
March Marc	alanthracene	56.55.3	200	9.0		0.42 J
1,000,000,000,000,000,000,000,000,000,0	apmene	50.72-8	85	0.56	990	0.47
March Marc	(b) Fluoranthene	191.54.5	De a	60 2	4	0.64
1,1,2,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	R.I.Fluoranthana	207.08.9	200	200	¥ .	0.44
10,51.4 10,51.4 10,000	c Acid	65-85-0	ş	¥.	¥	KR.
111-35-1	Alcohol	100-51-8	8	10000	1000	ž
1987 100	- Nordellowy)Methers	6 1	¥ Ç	2 2	≱	2 0 2
117-81-7 100 4.8 2.10	Chlorosopropy) ether	1-08-801	19	2300	10000	E
March Marc	thylheryliphthalate	117-81-7	001	49	210	NA
The Color The	enzylphthalate	85.58-7	190	100	10000	NR.
17.74.2 10.0 11.00 10.	1	718.01.0	2 6	5	¥ ç	
17.44-5 100 1190 100000000000000000000000	utyphthelate	84-74-2	90	20/5	00001	NR
1,2,7,4,3 1,00 0,56 0,58 1,00 0,58 1,00 0,58 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 0,50 1,00 1,	ctylphotelate	117-84-0	60	1100	10000	æ
1975 1970	ro(a hlanthracene	53.76.3	26	990	880	0.60
100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 1000000 1000000 1000000 1000000 100000000	phthalate	2.00	208	5000	OUUU,	Z Z
Models	- Aphthalate	131-11-3	25	10000	10000	A'R
17.75 100 0.66 1.000 1.0000	uthene	206-44-0	60	2300	10000	0.85 J
1,000 1,00	Mornhanson	76.81	38	2300	0000	3 22
1,200 1,20	Norobutadiene	67.68-3	<u> </u>		7.	¥
17.72 100 6 1.00 1.0	narocyclopentadiene	17-47-4	136	90	2300	Ä
15-58-5-5 500 10.000 10.0000	hloroethane	67.72-1	90	9	130	ž
RE 5275-9 NA NA NA NA NA NA NA NA NA NA NA NA NA	eou	10.00	200		1000	200
8.5275-9 IAA IAA IAA IAA IAA IAA IAAA IAAA IAA	SO-Di-N-Propylamine	621.64.7	ş	980	980	¥
100 140 140 180	acdmethylamine	62.75.9	¥	¥.	≨	NR
10000 100 230 4700 1	sodoherwamine	86-30-5	130	Û9)	200	NR
17,485.5 157 16.0 17.0 16.0 17.0 16.0 17.0 16.0 17.0 16.0 17.0 16.0 17.0 16.0 17.0 16.0 17.0 16.0 17.0	Interes	91.20-3	35	230	4200	S Z
105-95-2 50 100000 100000 1000000	filorophenol	87-86.5	3 3	3 8	24	ž
10000 10000 1000 1700 10000 100 NA NA	ndirene	65-01-9	*	Z		0 51 J
NA NA		108-85-2	05	10000	00001	ž
	92	10.86-1	2	3 4	47	¥

NJDEP - New Jersey Department of Environmental Protection mg/Ng - Wilgiams per Rognams, equivalent to parts per million U - Not obstacted at the POL J - Analyta inhabited helps POL anders astronated concernation

U - Not gescried at the POI.

J - Analysis assetzied below POII, and/or estimated concentration
IR - Analysis has recuested.
R - Analysis has recuested.
Re- Analysis and recuested.
Value accordance in AIDEP residential soil creamly criteria.

2002/22/0

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Notes: NJDEP - New Jersey Department of Emvironmental Protection mg/Kg - Miligrams per Kilograms, equivalent to parts per militon	ndine	Pyritage	Phenoi	Dhana threns	Pentachkyonhenol	Nitrobenzana	Naphthalene	N-Nifronogiphenylamine	N-Nitroscometrylamine	N-Kitroso-DI-N-Propylamine	tsophorone	ndeno(1,2,3-cd)pyrane	Hexachloroethane	Hexachionocyclopentadiene	Hexachiorobutadiene	Hexachorobenzene	Previous	Filographene	Dimethylyhthalate	Diethylphthalate	Management	Diberzo a, Nantinsoerie	Di-n-octyloraballate	U-4- but/phthalate	Chyseria	Carona	Carrier Sylvin mode	But Vibrativa Contractor	Bia/2-Ethylhexylinhthalain	Bis(2-Chloroscopropy)ether	Bis(2-Chlorouth Control	Bis(2-Charmed cavil Melhana	Benzyl Alzona	Benzoic Aud	Benzoik Fluoranthene	Benzold h liberylene	Benzolo Fluoranthene	HATTO B DATES	Sel Econo	AUDI accesses	Aceraphone	Acensprimere	4-Nitrophenol	A-Nitroaniine	H-Chlorophenyl-phenylether	4-Chloroandine	4- Chloro-3-methylphenol	4-Bromophenyi-phenylether	4.6-Dinimo-2-methylphenol	3-Nitrograffine	3.3'-Dichlorobenzidine	Gra-Matrician and	2-Nitropheno	2-Nitroangine	S-Administration to select on	D-Malfred and the land	Z-Chlorophenol	D-Chloropanhthalene	5 & Dollrobblene	2 4-Din Installane	O 4-Divingana	2.4-Dimethyloheno	2.4-Dichloropheno	2.4.6- Inchloropheno	2 4 5- Techorophero	1 4-Dichimbenzane	1 3-Dichbrobenzene	1.2-Ochloroberzens	1.2.4-Trichlombanzana	Units	Sampling Date:	Vertech Sample ID	The second secon
ent of Environmen	110-86-1	120000	1000	2000	17.00.0	98 87	91-20-3	80.78	62.75-9	62)-64-7	78-59-1	193-39-5	67-72-1	77-47-4	87-68-3	118-74-1	86-73-7	206-44-0	131-11-3	84-66-2	132-64-9	53.76-3	137-84-0	84-74-2	218-01-9	†-	T	t	Ť	1	t	†	†	65-85-0	+	1	1	†	t	120-12-7	208-96-8	83-32-8	100-02-7	100-01-6	7005-72-3	105-47-8	59-50-7	101-55-3	121-14-2	99-09-2	91-94-1	100	88-75-5	877	07.42	91.57.6	95.57	91,58-7	806.30.2	131-127	51-28-5	(05-57-9	120-83-2	88-08-2	65-95-4	106-46-7	541.73.1	95-50-1	120-82-1	Number	S	-	
nual Protection	ķ	į į	5 5	2 5	100	ă	ĝ	- 100	₹	40	چ	500	100	100	100	100	108	100	50	50	*	100	100	100	500	3	200	3 8	18	1		₹ :	1	ž.	8	E	8	3 3	33	1	3	8	3	3	ž	\$	100	NA.	¥	Ķ	100	\$	š	≰ 5	5	\$	5	£ ;	i i	Š	5		á	á	s	ž	ē :	50 50	100	marka	Criteria	Soli Cleanup	
	NA.	17000	10000		7 6	28	230	140	\$	0,66	1100	6.0	5.	400	-	0.66	2300	2300	10000	10000	*	0.86	1190	5700	8	3	1	110	40	2300	200	NA	10000	\$	0.9	V. *	0.00	0.00		10000	\$	3400	N.	NA.	35	230	10000	NA.	NA NA	N.	2	2800	X 5	NA V	2800	NA	280	20	1	-	110	100	170	62	ženo.	Sign	\$130	5100	818	-	Cleanup Critaria	-	
	NA NA	10000	10000		íš	500	4200	600	₹.	0.66	10000	4	100	7300	21	2	10000	10000	10000	10000	3	0.88	10000	10000	å	3	10000		2000	inon,	- - -	NA	fann	NA.	-5	NA.	100		Š	10000	NA.	10000	NA	*	¥	4200	10000	NA	N.A.	≩	3000	TOTAL TOTAL	5	10000		1400	5700			1	3100	10000	200	270	10000	10000	10000	1000	1200	marke	Cleanup Criteria		2
		14	25.0	0.33	2000		9.5	0.35 U	0.35 0	U 55.0	0.35 U	f 580 0	0.350	1.10	0.35 U	0.35 U	0.8	2	0.36 D	0.35.0	0.31 J	0.35 U	0.35 U	U 56.0	0.42	, L. 7.0	200		313	200	0.55	0 35 0	0 25 0	0.710	014	0 003	0.34		4/10	0.00	0.11.1	0.52	0.35 U	0.35 U	0.35.0	0.35 U	035 U	0.35 U	0.35 U	0.35 0	0.35 U	0350	0.35.0	0.55.0		200		200	135		07773		0.35.0	0.35.0	1360	0.50	0.35 0	0.35 0	3.75	maika	6/21/1999		
	5.2 U	3	4	1			0.45	170	3	1.7 0	1,7		170	5.2 U	170	170	2	13	170	170	0.68 1		1.7 0	0.37 J	大学 大学 大学 大学 大学 大学	2.0	2		١		7,0	1	1	35 U	S. 10	1.5			200	7		13	\$7 U	1.7 U	170	170	7.0	170	170	170	170	7		7		151	1	1	1		18 1			1		17	7	7,0	171)	ma/kg	175/1988		1000
		22	335		0.55	33	0 36 0	0.35	0.35 U	0.35 0	0.35 (0.35	0.35 U	10	0.35 0	0.35 U	0.35	016	0 35 U	0.35 U	0.35 U	0.35 U			ļ	l	75.0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.9	935.0	0.35 U	0.35 0	0.35 0	0.89.0	0.350	0.35 U	7 980 O	3	0.00	4.55	0.39	0.35 0	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0 % 0	0.820	0.35.0	0.35 0	0.35 0	0.35 0	0.55	0.35	035	035.0	235	35	0.69.0	0351	0.35 U	0.35 0	0 33	0 25 0	0.35 U	0.35 0	0.35 U	ma/ka	6/25/1999		A80570
	5,10	7	1		7					1.8 0	1.8.1	は まずる	1.8 U	5.0	-	i as	2.7	8.5			Ì	181	187	0.44		1	201	200	S.	1.8.1		18	1.8	196	2	2.2	1					l			l						1.8 0	1			1		\			1	Ī	1	1	1	T	1	1	Ţ	Ĭ	all Dist	672V1999		AA90518
	380	3	100	3 1			0 44 0	1.90	1.9 0							Γ	Γ	ľ	Γ	Γ			1.9 U	0.41	ő				19	19	1.90	1.80	1.80	3.70	* TO THE REAL PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE REAL PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF TH	2.3		31				ا									181				Ī	Ĭ	1					1	1		Ī	1	1	1		ma/ka	6/21/1999		AA90519
	100	ı		١		١	١	١	1							l			۱	Ì	ļ		l	l	L	ı		1	1	-	1	1	Į		-	ı	0.38 0	0380	0.70	0.30	0.36 0	0.36.0	D BE C	0.38.0	0.38.0	0.38.0	0 88 0	0.38 U	0.38 U	0.38 U	0.38 (0.38 U	0.88.0	0.38 U	0.38 17	0 38 U	0 36 0	0 30	0380	038	0.76 U	0.38 0	0.38 U	0.38 U	0.36 0	0.36.0	0 86.0	0.38.0	0.38 U	marka	6/21/1999		AA80520
	0	0.35	0.35	0.35.0	0.35 U	0350	0350	0.35 U	0.35 U	0.35 U	0.35 U	0.35 0	035	1	6.35 0	0350	0350	0.35 U	0.35 U	0.35 U	0.35 (0.35 U	9.35	0.081 3	0.35 0	25.5	0.35 0	0350	0.35 U	0.35.0	0.36 U	0.35	0.35 0	0.69.0	0.35 U	0.35 U	0.35 (0.35	l	١		١	ļ	l		l	Į					Ì	1		١	ı	١	1	١	ı		١	١	ŀ		ł	ı		1156.0	١,	673/1999		AA90521
	110	3.5	0 35 0		0.36 15	0.36.0	0.36.0	0.36.0	0.35.0	0.35 U	0.35 U	0.29 J	0.35 U		0.35 U	0.35 U	0,35	=	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.098	28.2	200	0.00		2	0.35 U	0.35 U	0.35 U	0.35 U	0.71 0	200	1			Ī	Ì	ĺ	1	Ī	Ī			Ī				0.35 U	1	1		Ī	1	1	7	1	1	Ī	1	Ì	Ť	Ţ	ĺ	Ť	ľ			6741999		******
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Table 3
Summary of Semivolattle Organic Compounds Soil Sampling Results
Naporano and Hugo Neu Facilities
Port Newark
Newark, New Jersey

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Summary of Semivolatile Organic Compounds Soil Sampling Results
Naporano and Hygo Neu Facilities
Port Newark
Newark, New Jersey

Column	leē. M∩	Sample ID: ng Depth (ft)	Ž,	NJDEP Impact to Groundwater	NJOEP Residential	NJDEP Non-Residential	SB10.5-1 0.5-1	SB2 1-1.5 1-1.5	SB2 3-3.5	SB3 1-1.5 1-1.5	5813-3.5 3-3.5	SB-5A 0-0.5 0-0.5	SB-5A 1.5-2 1.5-2	SB-5A2.5-3	SB-5A 6.5-7 6.5-7	SB-58 0-0.5 0-0.5	\$B-5B 25-3 2.5-3	SB-48 7-7.5 7-7.5	SB-5C 2-2 2-2.5
	를 출발 관합		$\neg \neg$		Cleanup Criteria maika	Direct Contact Soll Cleanup Criteria malka	AA90504 6/23/1999 mg/lkg	AA90505 6/23/1899 mg/kg	AA90506 6/21/1999 mg/kg	AA90507 6/23/1989 mg/kg	AA80508 \$723/1999 mg/kg	AA90509 6/23/1989 Mg/kg	AA30510 BZ3/1999 mg/kg	623/1999 ma/kg	AA90512 \$22/1989 mg/kg	6/21/1999 ma/kq	AA90514 6/21/1999 mg/kg	AA98615 6/23/1999 000/ftd	AA90516 473/1998
	151		120-62-1	100	B P	1200	0.35 U	0.35 U	0.35 U	0 3 C	035 U	18 U	0.35 U	0.34 U	D.38.0	3.6 ∪	110	0.35 U	0.38
			11-73-1	100	5100	10000	0.35 U	0.35 0	0.38 0	32.5	0.35 U	0 0	0.35 U	2 N	0.98.0	3.60		0.35 0	
	8Ľ		106-46-7	100	570	10000	0.35.0	0.35 U	0.35 U	7 76	0.35 U	0.0	0.35 U	0.34	0.36 U	3.8.0	110	0.35 U	0.38
	تَاهَ	Ţ	88-06-2	8 9	5600	270	0.35 U	0.35 U	0.35 U	0.34 0	□ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0.35 U	0.34.0	0.380	3.6 (1	7	0.35	0.36 U
		П	120-83-2	10	170	3100	0.38.0	0.35 U	6.35 U	0.34 U	0.35 ()	1.8 U	0.38.0	0.34	0.36 Ü	340	-	0.35.0	
	5 lá	7	105-87-9	2 5	201	10000	0.35 U	0350	0.35 U	7.89	1000		0.35 U	0.34 U	0360	3.6 U	D.	0.35 U	0.38 (
	\$ E		121-14-2	01	2-	3	0.38.0	035.0	0.35 U	0.34 U	0.35 U	0.81	0.350	0.58	0.38.0	380	230	0.71 U	072
	fi N		606-20-2	10	-	,	0.35 U	0.35 U	0.35 U	0.34 U	0.36 U	1.80	0.35 U	D 75.0	0.38.0	3.6 ∪		0.35	1860
	ji Io	Ţ	91-58-7		¥	2	0.35 U	0.35 U	038.0	2	0.35 U	0.81	0.35 U	D MG	0.38 D	38 (3	110	0.35 U	0.67
	ili N	T	85-5/-8	2 4	200	9200	28.0	2000	0.30	0.34	0.00	087	1000	*	0.36 U	3.6	;;;	0.35 U	0.38
	i	Ī	65-48-7	*	2000	00001	0.35 U	0.35 U	0380	0.34 U	0.35 0	1.8 0	0.35 U	1 750	950	38.0	11.1	0.35 0	0.36
		П	88-74-4		¥	≨	0.38.0	0.35 U	0.35 U	0.34 U	0 35 U	180	0.35 U	0.34 U	0.38 U	3.80) - -	0.35 U	938
	削	T	88-79-5 106-44-5	¥ \$	AN CORE	***	0.35 U	0.35 U	0.35 0	20.00	200	200	0.35 0	D 75.0	0.36 U	3.6 U		0.35 U	0.36 (
	(18 11	T	1.64	<u> </u>	2000	9	0.35	0.35 []	0.35 U	20.75	0.350	0.8	0.35 U	\$ 20 C	28.0	3,8 0		0.35 U	0.56
	Ē	Γ	29-09-2	¥	Ā	×	0.35 U	0.35.0	0.35 U	0 % 0	0.35 U	1.8 U	0.35 U	2 2 2	1 98 0	3.8 0		200	86.0
	ぼ 1 '	П	121-14-2	V.	ž	AN AN	038.0	0.35 U	0.35 U	D # 0	0.35 U	167	0.35 U	0.34 U	0.36.0	3.6 U	101-	0.50	989
Column	해 3 :	7	101-55-3	¥	¥¥.	NA.	U 38 0	0.35 U	0.35 L	0.34 U	0.35 U	2	0.35 U	0.34	0.36 U	3.8 U	110	0.38.0	0.36
Control Cont	일 기	T	08-20-/	200	10000	1000	0.35	0.00	0.35 U	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.35 U	128	0 0 0	0.36 0	0.38 U	3.6 U		0.35 U	0.36
	- [ặ	١.	005-72-3	¥	¥	3 ×	0.35	0.35 U	0.35 U	0.34 U	0.35 U	1.8 U	D 35 U	3.50	200	3.6		0 68	96.0
Column	igi Tr	7	9-10-00	¥	ΝΑ	æ	0.35 U	0.35 U	0.35 U	0.34 U	0.35.0	0.8.1	0.3 1	0.34 U	0.38 U	3.8 U) 	0.35 U	8 6
No. No.) <u>.</u>	7	100.02.7	¥	\$.	2	0.35 U	0.35 U	0.35 U	7 7 7	0.35 U	7	0.35 0	25	0.38.0	360	110	0.35 U	0.38
100 100) 5	+	0.7-52.9	00	7400	0000	0.35	2 2 2	0.35 0	200	0.35.0	0.88.0	0.40	3 2	0.36 U	3.6 0	£	0.35 U	[-
10 10 10 10 10 10 10 10		┰	20-12-7	100	10000	1000	0.11	0.35 0	0.35.0	0.50	0.35 U		9-	0.00	0.36 U		0.49	0.35 U	0.085
Column	함 터	Н	92-87-5	ž	ž	ź	0.69.0	0.69.0	0.69.0	J 89'0	Н	3.50	0.71 U	0.68 U	0.72 U	7.2 D	Ì,	0 1/2) S O
No.	äj	Ħ	56-55-3	390	6.0		0.41	0.35 U	0.35 U		ķi.	200	のないのでは、	0340	0.36.0	- 大学を表する大学	ŀ	0.35 U P2	
No. No.	iĝ	+	05-99-2	05	98.6		10 (Carlotte 10)	0.35 U	0.35 0	200	45	Mary Control	K LIVE BY	3 2	0.55	100000		0.35 U	
No. No.	র 라	Н	91-24-2	¥	ΥX		0.62	0.35.0	0.35 U	0.11 J	0.35 U	13.7	1.3	0.34 U	0.36 U	1.6 J	27	ч.	010
100 100	힌	Н	6-00-70	205	6:0	П	0.61	0.35 U	0.35 U	0.34	25 U 25 U	学を記るない		0.34 U	D 9E 0	24 July 24 19 18 18 18 18 18 18 18 18 18 18 18 18 18		0.35.0	8
100	s S	┪-	00-65-0	¥ 5	WW.	AN O	0.689	0.53 0	1 58 0	200	0.35 U	200	0.70	0.980	0.72 U	7.2 U		0.71 U	0.72
100 100	6 -	,	11-91-1	5	¥	×	0.35.0	0.35 U	0.35 U	0.34 U	0.35 U	1.1	0.35 U	0.34	0.36 Ü	380			9
100	<u>9</u> 6	H	11-44-1	01	0.66	8	0.35.0	0.35 U	0.35 U	034 ()	0.35 U	1.8 U	0.35 U	034.0	0.36 U	3.6.0		0.35	0.36.0
1,000 1,00	76 Ye		08-60-1	₽ 	2300	10000	0.35	0.35 U	0.35 0	750	0.36	0 8 5	0.35 U	J.	0.36 U	3.6 U	1.1 U	0.35 U	0.36 0
No. No.	18 5 t	╅	15.88.7	3 5	48	210	0.86	0.35.0	0.350	034.0	0.35 0	0.74	11 21 0	20.0	2000	*	2	0.35 U	=
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1000 0.05	[]	H	8-01-8	500	6	40	0.62	0.35 U	6.35 U	D \$50	0.35 U	3.8	2.5	0.34 U	5.36 U	1	S - W. FID. B. C.	0.38 U	25
100 100	ۇلۇ 1	-	17 84 G	001	2700	10000	0 17 J	0.35 U	0.35 0	X 2	0.35 0	7 7 7		7 2 2	0.38 U	L. I	0.81.3	0.38 U	0.38
10000	(1) (1)	+	3.70-3	38	0.86	2000	0.35	0.35	0.35		0.350	0.43	1	5 7 0	200		0.52 J	0.38	0.36
10000 10000 035 U 035		+	32-64-9	Į.	2	NA NA	0.35 0	0.35 U	0.35.0	0.34 ()	0.35.0	18.0	ı	0.35	1 9E 0	3.8 ()		8 6	52
10000	틴	Н	14-86-2	25	10000	10000	0380	0.35 U	0.32.0	0.34 U	0.35.0	0.38 J	ı	0.34.0	0.36.0	3.6 U			\$
10000 100000 10000 10000 10000 10000 10000 10000 10000 100	el H	┰	31-11-3	50	1000	10000	0.35 U	0.35 U	0.35 U	0.34 U	D.35 U	1.8 U	Н	O 45	0.38 ()	3.6.0	110	0.35 U	
Columbia Columbia		+	36-44-0	8 8	2300	10000	0.41	0.35 U	0.35 U	7 7	0.35 U	5.4	- 1	0.34 0	0.36.0	L. Ł	- FB	0.35 U	6.5
100 100	ð	┿	18-74-1	100	0.68	2	0.35 U	0,35 U	0.35 U	034 U	0.35 U	1.8.0		7 7	0.38.0	- 3	3.6	0.35 U	- 90
100 100	ĕ	Н	17-68-3	100		21	0.35 U	0.35 U	0.35 U	034.0	0.35 U	1.8 U	Ιì	0340	0.36 Ú			0.35 U	980
100 100	हीहै 1	+	77.47.4	ē i	004	2300	7		D		7	5.3 U	Ų	71	n F:		3.4 U	1.1 U	1.1
100 1000 1030 1035 1	ili III	+	57-74-1 52.30-6	800	20 0	8	0 27 0	25.0	0.35 0	1 1 1 1	0.35 U	0.00	0.30 0	7 2		36	1	0.35 U	0.36
Color Colo	ilg II	╄	6.59.1	38	2001	10000	0.35 U	0.35 0	1000	200	0.35 0	180	035.0	1 2 2	28.0	9	7	0.35 U	0.74
100 100	Ιğ	Н	21.64-7	10	0.85	0.86	0.35 U	0.35 0	0.35.0	0.34 U	035 0	180	0.35 U	0.34 U	138.0			0.35 0	860
140 150 153 U	él	Н	12-75-9	∡	٧×	≨	0.35 U	0.35.0	0.35 U	0.34.0	035 17	ìI	0.35.0	0.34 U	0.36 U	3.8 U s	2:-	0.35 U	989
24 0.35 U	1년 1 년	 -	1-20-3	38	9 5	900	0.35	0.35 U	0.35 U	1 1	0.35	- 1	0.00	7 7	0.38 0	36 U	D \$1	0.35 U	0.38
No. No.	jķi	Ļ	18-95-3	g	200	520	0.35 U	0.35 U	0.38.0	0.50	0.35 U		0.35 U	0.70	38.0	286	2	2 4	6.6
NA	ßİ		2-98-2	8	8	24	0.38.0	0.35 U	0.35 U	0.34	535.0		0.3\$ U	0.34 U	0.36 U	3.6 U		1000	8 5
10000 100000 10000	[] 2		5-01-8	3	¥	¥	0.27.7	0.35 U	0.35 U	0.34 0	0.35 U		35 00	0.00	0.36 U	4.4	19	0.35 U	-
W	le N	+	200-80	100	4700	10000		0.30	0.35	5000	0.35 U	200	000	1 2 0	2 2	3.5	11.0	0.35 U	0 BE'G
	[2] (1)		10.88-1	¥	NA.	2	 - -	0.50) P		101	53.0	0.1	200	20	e C	R T	0.35 U	2
UDEP New yearsy Department of Environmental Protection The Mayerang of Registration of Environmental Protection The Mayerang of Registration of Protection The Mayerang of Registration of Protection	6																		
The Anti-provide control to past per malion 1. In definition to past per malion 1. Anti-provide control to p	ODEP.	New Jersey Department of E.	invironmental Prote	action															
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NR. A/Abbas net mineried	÷!	Analyte detected below POL	and/or estimated t	noncentration															
The state of the s	Ě	Analysis not requested																	
		Makes symmetrical flow in INCD .	day believed and	Section of the section of															

		Semple ID: Ing Depth (fl.) ch Semple ID: Ing Date:	C.A.S.	Change trapact to Groundwater Soil Cleanup Criteria	Residents Residents Direct Contact Soil Clearup Cateria	Non-Residental Non-Residental Direct Contact Soll Cleanup Criteria	MW-N2 0.5-1.5 AA94324 8/27/1999	A \$-6.0 A \$-6.0 A \$-6.0	0.6-1.5 AA94549 8/26/1999	8H-N1 4.0-4.5 AA94150 82251999	4.5-2.0 4.5-2.0 AA90433 6/23/1999	AAB0434 6/23/1989 moffee	AAB0327 6/22/1999	MW-C2 S-4 6-7 AA90328 675/1999	4.5-2.0 4.5-2.0 AA30435 67241939	MW-C3 S-4 6-7 AA90438 6/23/1989	MW-C4 5-1 1.5-2.0 AA90437 6/23/1999	MW-C4 \$-3 6-8.5 AA80438 6/23/1999	581 2-2.5 2-2.5 AA90503 6723/1999
		nethorohansen	120-82-1	90	88	1200	1 00	17 LO	1	Ł	0 17 0	╂_	0 94 11	1 2 2		mg/kg	E .	mg/kg	
		crobenzane	95-50-1	8	5100	10000	0.60	0.47.0	Н	2,72	0.17 U	0.18 U	0 26	0.18.0	1.8 U	0.49.0	D \$1	0.60	اه ا
		lorabenzene	545.73-1	190	805	10000	n 60	0.21.0	1	24.0	12.5	0 78 0	7 7 60	0.18 U	0 8	0.18 U	0 8	0.42.0	0
		CHOTOPEN	1-62-56	302	2600	10000	0.60	2 2 0	Ì	0.17	0170	0.18 0	0.140	0 48 0	8.	0 18 0		0.97	
		ichlorophenal	88-06-2	٩	22	270	0.6.0	0 17 0	Н	0 17 U	0.17.0	0.18 U	0.84	0.18 U	1.8 U	0.48.0		D46.0	6
		filorophenol	120-43-2	26	170	3100	0.9 U	0.17 U		0 11	0.17.0	0.18 U	3	d,18 U	7.0	0.16 U	1.9.0	D /40	6
		- emyrpheno	105-67-5		8 5	10000	0.870	0 22 0	1		1			180		0	1	0.797 U	o
		frompliene	131.4.9	2 5	-	2000	0 0 0	7 1 1 1		17.0	3 610	0.18.0	0.00	1000	- <u>1</u>	75.0	2000	1.9 U	9.6
		frotalliene	508-20-2	100				70.68	l	0.10	017 0	0.18 U	0 34 0	0.18 2		1 81 0		21,697	
		onaphitalene	91.51.7	*	¥	Ž	0.9	0.4.9		U 410	0.17 13	0.180	0 84 0	2 48 0		0.18.10			36
		pheno	95.57-8	و	280	5200	0.9 U	0.48		0.17 U	0.410	0.18 U	0.54 1	0.18 U	78.	0.18 0	061	0.80	
		inaphthalene	91.57-6	NA	WA	2	D 6:0	6.17 U		0.17.0	0.410	0.18.0	1.9	0.18 U	28.	0 18 U	0.48	9	6
		pheno	95-12-7	A.	2900	10000	D 6:0	G.17 U		0.170	0.17 U	0.18.0	0.34 U	0.18.0		0.18.0	106-	0.690	ľ
		in line	85.74-4	ž		¥	0.6.0	0.430	٦	- - -		0.18 U	3.	0.68.0	2	0.18 U	1.00.	U 780	Ó
The control of the	The control of the		88-75-5	ž!	M.	NA	300	1	ľ		1	200	3 2	200		0 18 U	190	0.87 U	b
The control of the		Input Part of the	2450	ž	0007	19998	0 8 0	617.0	ľ		0 / 0	9 6	200	0 0	200	0 18 0	0.5	0 280 0	ò
The control of the	The continue of the continue	auline auline		3 6					֓֟֟֓֟֟֟֟֟֟֟ <u>֟</u>							0 1		200	اة
Column C	Column	MAZ-Madhadalan	707-00	2 5	S. S. S. S. S. S. S. S. S. S. S. S. S. S	¥:	2 2 2		٦					2 0 0		0 38 0		0.87	ö
100 100	The control of the	DOMONIA PROVIDENCE	101.563	ž Ž	8 2	\$	200	1 2 4 0	,)	0.40	0 44 0	0.481	200	9 6		0.00	386	0.87 U	اة
No. 10.000 No.	Column	O-3-methylophenol		1	0000	2000		1	֓֟֟֓֟֟֟֓֟֟֓֟֟ <u>֟</u>	7 7 7	7,610	0.18 (0 24 0	200			***	7480	9
Control Cont	Column	Denvine	8,120	ź	230		250	0 210	ļ	040	040	0.48.5	0.110	0 18 U				2 4 6 6	j Ç
10.00 10.0	1985 1985	opheny-phenyether	7005-72-3	***	NA NA	1		10.60		0.17 U	0.17 U	0 18 J	0.94	0.18	281			2 6 6	⇒ c
Column C	Column	ruline	1000	1	AN AN	NA.		0.17 []	П	0.40	0.4.0	0.18 (J	23.0	0.48					36
1975 1975	1975 1975	Outeuc	100-02-7	2	₹	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.60	0 11 0	ı	0.40	D 61 0	0.38.0	0.80	0 18 0		0.00	100	13.60	i c
1985 1985	Column C	hthere	83.32.9	8	3400	COOCI	0.33 J	017.0	ı	0.10	0.17 U	0.18 J	12	0.810	108.	1 860			ľ
Colored Colo	Color Colo	httylene	208-96-8	₹	¥		0.80	0.17 U	ı		0.47.0	0.810	0.69	0.18 []		180		0.460	ic
10.00 10.0	Color Colo	aug.	120-12-7	100	10000	10000	0.81.3	0.47.0		0.17.0	0.17.0	0.48.0	52	0.48.0	0.49 J	0.18 U	6.5	ļ.	
Column C	Color Colo	- - -	92-67-5	ž	2		0.81	0.35 U	ч	980	N O	╣	2	0.35 U	37.0	03/0	3.8	28.	6
Column C	1975 1975	Januaracene	58-55-3	ğ	60	Ĭ	1.55	200 a	ı	7 (1)	520.0	Ĩ	7	0 18 0	The state of the s	0.18 U	1		6
1971-197-197-197-197-197-197-197-197-197	Control Cont	The same of the sa	277		0.00			100 m	el.				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		(0110			0.3
Company Comp	Control Cont	i in Therefore	248-677	200			Winds and the second	2 4 4 7	4		0.00	Į		3 0	The state of the s	0 10 0			E
Control Cont	1985 1985	Fluoranthana	207.08.0	1		†	1 20 1	7,70	П	0.420	5.076		ではないできた。	0.18 ()	- ASSESSED CO. S. S. S. S.	0.00	The state of the s		
The control of the	Comparison Com	Acid	05-65-0	₹	¥	, <u>¥</u>	181	0.35 U	ı	0.35 U	0.34	•		0.35 U	1	9370	10.0		36
Company Comp	Company Comp	Conci	100-51-6	92	10000	10000	0.9 (0.17 U		0.17.0	0.17 U	П	0.94 (0	0.18 U	1.8.1	0 18 13	1 6.	11 28 0	
Column C	The control of the	ordethoxy)Matherie	1-10-111	H.K	WW.	¥	0.8:0	0 110		0.17.0	0 44 17	2	0.860	0.18 U	1.80	0.18.0		269	
Company Comp	The companies The companie	loroethyl)arher	111 244	10	990		0.60	01711		D.17 U	0.47.0	0.48.0	0.94.0	1 D 8 C	1.8 U	0.18 U	1.96.	2.60	6
1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	Control Cont	lorosopropyl)ether	108-60-1	03	2300	10000	0.60	0.17.0		7/0	0.170	0.18 U	0.94 U	0.18 U	1.8.0	0.48.0	1.9	0.87	6
Fig. 19	March Marc	Whexyiphthalate	117-81-7	100	49	210	6.8	0.63	Н		-	4	*	r 9800	£3	0.810	9	-	00
Figure F	Fig. 19	Pythinalate Pythinalate	288.	d to	1100	10000	0.60	0.17 0	-		0.00	7	6.74.0	200	15.7	D.18 U	3.3	0.000	٦
Continue	Principal Control of the Control o		2	ş	V.	₹	0.28)	0.17	ı		5	4	*	2 2 2		0.18 U	Ц	4.5	ď
Comparison Com	1,500,000,000,000,000,000,000,000,000,00	2	276-01-8	ore	8	\$		0.068	ſ	0	0,11	4	77	2 10 0	252	0.18.0	5	6.6	0.3
Continue	Part Part	The second	ž	8	5700	10000	0.6.1	0.035	-		8	-	3.5	200	787	0 18 0	190	0.87	0.1
1987 1988 1988 1988 1989	Continue	Bulling	17.040	ŝ	1100	10000	260	0.17 0	١			-		0100	260	D. 58 U	D 48 J	0.60	e.
Table Tabl	1,2,4,4,4 1,10 1,	L'Il Minthracene	53-70-3	130	0.66	0.86	0.23 J	0.17.0		0.1.0	017.0	┥	6	0.18 C) 180	0.18 U	0.51 3		2
Section 1,0000	Part 1982		132-64-9	¥	ž	¥N .	0.80	0.17 U			0.17.0	-1	0.63	9,18	1.8 U	0.18 U		1.2	E
1,11,11,11,11,11,11,11,11,11,11,11,11,1	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	thalate	64-86-2	20	10000	10000	<u>0.6.0</u>	0.17 0		0	0 44 0	ч	- D - 56-0	0.1B U	180	0 18 0		0.870	
10	Control 170 2200 1700 0.71 <	phibalate	131-11-3	93	10000	1,0000	0.60	0.17 T		0 00	0.47.0	Н	0.84.0	0 18 U	1.80	0.80		D (4.0	C
The container The containe	Considered 18.75.7 100 25.00 100.00	nene nene	264	29	2300	10000	2.4	0.14.1	-		0.18	-1	5/2		2.6	0.18 U 1		8	0.3
1.2 1.2	1974 190 196 196 1970 197		66-73-7	100	2300	10000	0.32 7	0 17 U	١		0.17 U	-	-	0.18 U	1,8,0	0.18.0		7	6
15 15 15 15 15 15 15 15	1982 1982	procentene	118-74-1	100	980	2	180	0 17 0		0/15	0 17 13	-+	9 760	200	2	1 A B O		D 48.0	0
10	Confequencies 77-474 190 660 190 073	Contactene	87-88-5	000		2;	0.69	9	J		200	+	3		2	0.18 U		0.460	6.3
19 19 19 19 19 19 19 19	10	drack-dopentaciens	7	36	400	7300	27 0	0.52 U	ľ	70.00	0.51	+	7.87	2 2 2	200	0.55 U		2.8 U	ا
14 15 15 15 15 15 15 15	14 14 14 14 14 14 14 14	Cost Sale	97-72-1	190	9	100	0.9 🗆	0 17 0	1			┪	35		200	0.18 U	_	0.870	0.3
Comparison Com	Charle C	Z.3-Otlowene	193-39-5	290	6.0		0.55.1	0.17.0			0.052	-1	0.84	0.48.0	0.47	0.18.0	т	The state of the s	S
Comparison Com	Part	90	78-59-1	93	1100	10000	7,60	0.17 U		0 / 0	0.44	Н	0.94 U	0.18 U	180	0.48 U	1	0.60	Ē
12 12 13 14 14 14 15 15 15 15 15	15	9-U-N-Propytamine	621-84-7	10	0.68	0.08	0.8 0	0.17.0			0.47 U	-	38	0.48	1.8.0	0.18.0	IТ	0.40	6
1.00	1,500	odimethylamine	62-75-8	¥	NA NA	¥	n 6'0	0.420	1		0.410	ч	0.94	0.18 (1.8 U	0.58 U	г	0.570	E
10	10	DOIDHGHAGITANE	B6-30-6	100	140	900	0.60	0.17 []	li	2	0.17	-	0.84	0160	7 8 7	0.18.0	r	2.60	
10 28 24 039 037 038 0	19	2	91.20-3	190	230	4200	016	0.17 U	ľ		1 0 713	_	=	0.18	0.62 J	0.81.0	Т	F	G
Section Sect	100 8 24 04 018 01	Zane	98-95-3	10	28	520	0.9 U	0.17 U	ľ	0.17 U	0.440	М	0.94.0	0,16 U	1.8 U	0.18 U	Т	0.60	E
183-85-3	19-95-2 19-9	ordoneno	87-88-5	160	9	75	0.8.0	240	Ì	0.17 U	0.17.0	Н	0.84	0.18.0			т	1 280	
182-00-4 193-00-4	19-00-0-2 19-00-0-2 19-00-0	John	85.01-8	ž	2	≨	2	0.11	ľ	0.17	110	Н	7.8	0.48(1)	183	0.18 0	т	2	0.33
119-80-4 150 1700 1700 1700 1700 1700 1700 1700	128-00-7 100 1700 1700 1700 1700 1700 1700		108-95-2	20	10000	10000	n 60	0.17.0	1	0 17 0	0.17 U	┝╍	0.94 U	0.48.0	1.6 U	0180	Т	D 26.0	8
New Jerger Digital Trades of Trades	New Yearsy Department of Environmental Protection Will prime the Victorian and Protection		129-00-0	130	1700	00001	2.9	0.21	ì	0.77	0.2	⊢	-	0.18 19	-	0.48	т		1
New Jensey Department of Environmental Protection Williams be the Committee of the Committe	Willy are use Department of Environmental Protection Milly are use Department of Environmental Protection Milly are use Department of Environmental Protection Milly are use Department of Environmental Protection Milly are used by Committee or Protection Milly are used by Commit] 	110-88-1	₹	NA.	AN	7.7.0	0.52.0)	0.22.0	0.50	┿	280	0.83 U	D 5'5	0.55	_	- - - -	
New Araby proprient of Environmental Protection Milyama per Krüppman equivalent to parts per milaon Milyama per Krüppman equivalent to parts per milaon Milyama per Krüppman equivalent to parts per milaon Milyama per Krüppman equivalent to parts per milaon Milyama per Krüppman equivalent to parts per milaon Milyama per Krüppman equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama per Milyama equivalent to parts per milaon Milyama equivalent to parts per milyama	New Jeary Department of Environmental Projection Militaria per Klappana, equivalent to parts per millaon Not detected at the Pol. And detected at the Pol. And the Department of Environmental Projection And the Departm								١			1					╗	,,,,	Ì
New least by Department of Environmental Potentials Not predicting the Region of the Potential Potentials of the Potential Potentials of the Potential Potentials of the Potential Potentials of the Potential Potentials of the Potential Potentials of the Potential Po	Withington to Environment of Environ																		
Militaria per disposaria, unividualem to parts per militaria. Militaria per disposaria, unividualem to parts per militaria. Anylok debeterada barany PLO. In militaria samanaga concentration	Militarian ber Kidogana, quelvierier to parts ger milion Militarian ber Kidogana, quelvierier to parts ger milion Markelde debted at the PQL Analysis debted at the PQL and or can be a second to the PQL and or can be a second to the parts and the parts an	 New Jersey Departmen 	1 of Environmenta	(Protection		•													
PROTOCHECUS II NA POL.	Analysis detected at the POL. Analysis detected at the POL and or concentration Adalysis or concentration	Militaria per Kilogram.	s, equimalent to pa	uts per million															
Analysis declared between P.D. and or setting the concentration	· Analk de berade bow w P.D. and or sample concentration Analyse or or endested	De sus is personed by	ه_																
	pagenga ya wa kafanga ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya wa kafana ya	- Anterna detected below	POL and/or eatin	nated concentration															
Valvier carcected the NUDEP resistant and a value of the NUDEP resistant and a value of the NUDEP resistant and value of the NUDEP r																			

Newark, New Jersey	Port Newark	Naporano and Hugo Neu Fedilities	Commence of the second

NA Not Available	Shaded value exceeded the NJDEP residential soil cleanup unterta
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Client Sample ID:		AJOEP	ADDEP	ABOLN	SB-4B 0.5-1	SB-4B 6.5-6	TB 6/23	TB 6/24	TB 6/25	PA-C6-E6-01	PA-C6-E7-02	PA-C6-S7-0
Sampling Depth (ft)		Impact to	Residential	Non-Residential	0.5-1	ĭ	£	\$	ž	1.0-2.5	3.0-4.0	3.04.0
Ventech Sample ID:	?	Groundwate?	Direct Contact	Direct Contact	AA90526	AASOSZ/	AAYUUZZ	22005Z	AA90530	A836347	AES6551	AB66558
Units:	Number	mg/kg	mg/kg	mg/kg	mq/kg	mg/kg	mg/kg	πgikg	mg/kg	mg/kg	6y/6w	mg/kg
1,1,1-Trichkorpemane	71-55-6	56	210	1000	0.64 U	0.56 U	บ 63 บ	0.63 U	0.63 ป	0.0056 U	d 0053 U	0 0054
1,1,2,2 Teirachloroethane	78-34-5	_	34	70	0 64 U	0.56 U	D.83 U	0,63 U	063 U	0 0056 U	0.0053 U	0 0054
1.1.2-Trichlomemane	79-00-5	1	22	420	0.84 U	0 56 U	0 63 U	063 (0.63.0	0.0056 U	□ 0053 U	
1,1-Dichlorosthane	75-34-3	10	570	1000	0.54 U	0.56 ∪	0 83 ∪	0.63.U	0 63 U	0 0056 U	0.0053 U	
1,1-Dichlorosthene	75-35-4	10	8	150	U 1990	0.56 ∪	0 6 3 U	0.63 U	0.63 U	0.0056 U		
1,2-Oichlorobenzene	95-50-1	50	5100	10000	0.64 U	0.56 U	0 63 U	0.63 U	0.63 U			
1,2-Olchloroethans	107-06-2	_	6	24	D.64 U	056 C	063 U	0.63 U	2.63 (0 0056 U	0 0053 U	
1,2-Okthoropropane	78-87-5	NA	10	43	0 64 U	0.56 U	0.63 U	0.63 U	0630	0.0058 U	0 0053 U	ı
1.3-Dichlorobenzene	541-73-1	100	5100	10000	0.64 U	0.56 U	0 63 0	0.63 U	0.63 U			
1.4-Dichlorobenzene	106-46-7	100	570	10000	0.84 U	0.56 U	0.63 U	0 63 U	0.63 U			
2-Butanone	78-93-3	ક	1000	1000	3.2 U	2.8 U	310	3.1 0	310	0 028		
2-Chloroethylvinylether	110-75-8	NA	2	NA	0 64 0	0.56 0	0 63 0	200	0.63	0 0006	l	Γ
Z-Haxanone	100 10 4	5 3	N.	S S	2.0	3 2 2	261	340	200	200	0.025	ľ
Acatons	67-64-1	8	1000	1000	260	220	2.5 U	25 U	2.5 U	0.78	0.0137	0.047
Acrolein	107-02-8	NA.	NA.	₹	1.9 1	170	1.9 U	190	1.9 U	0.017 U	0.016 U	0.016
Acryloniinie	107-13-1	1 1	1	5	1.3 0	110	1.2 U	1.2 U	1.2 U	0.0077 U	0.0074 1	0 0075
Benzana	71-43-2	_	3	13	0 13 U	011 U	0 13 U	0.13 U	013.0	0 0011 U		0.0011
Bromodichloromethane	75-27-4	_	11	\$ 6	0.64 U	D.56 C	0.83 U	0.63 U	063 0	0.0056		0 0054
Вготобит	75-25-2	_	86	370	064 U	0.56 U	D 63 U	0.63 U	0.63 U	0.0056	0.0053 U	0.0054
Bromomethane	74-83-9	_	79	1000	0.84 0	0560	0 63 0	0 63 0	0.63	0.0056	0.0053	0.0054
Carbon Disulfide	75-15-0	*	NA	3	0.84	0.56 U	0.00	0.63	0.83	0.0056	0.0011	0 0054
Carbon Letrachionde	108 80.7	-	27	*	0.54	0.36	283 0	0.00	083	0.0056	0.0053	0 0054
Chlypethane	75,003	À.	ZÞ.	NA CONTRACTOR	084	0.56 C	0 63 0	0.63 U	0.63 U	0 0056	0.0053	0.0054
Chlorotom	67-86-3	_	19	28	0.6%	0.55 U	0.63 U	0 63 U	0.63 U	0 005B U	0.0053 U	0 0054
Chloromethana	74-87-3	10	520	1000	0 64 0	0.58 U	0 63 U	0.83 U	0 63 U	0.0056 U	0 0053 U	0.0054
cts-1,2-Dichlorcethene	156-59-2		79	1000	0.54 U	0.56 U	0.63 U	0.63 U	0,63 U	0 0056 U		0 0054
cis-1,3-Dichloropropene	10061-01-5	-		5	0.84	0.56 U	0.63 U	063 U	0.63 U	0,005B U	l	0.0054
di-Isopropyl-ether	108-20-3	NA.	N.	NA	0.64 0	0 56 0	0.63 U	0.63 U	0.63 U			
Ethylhanzana	124-48-1	100	110	1000	0.54 0	0 11 6	0130	0130	0.63 0	0 0054	0.0053	0.0054
M&P-Xylenes	108-38-3	67	410	1000	0.59	0.22 U	0.25 U	0 25 U	0 25 U	0.0051	r 2100 0	0 0065
Mathyl-t-butyl other	1634-04-4	NA	NA	NA.	013 U	0.11.0	0 13 U	013 U	0 13 U			
Methylene Chloride	75-09-2	-	49	. 210	0.64 U	056 0	063 U	0.63 U	0.63 0	0 0062	0 008	0.007
O-Xylene	95-47-8	67	410	1000	0.26	0.11 0	013.0	013 U	013 U	0.011	0.0028	0.0031
Styrene	100-42-5	100	23	97	0.5/	0110	0130	0 25 0	0 13 0	0.0028	0 0011	0.0011
t-Butyl Aicohol	75-65-0	. 3	\$	¥	1.3 0	110	120	200	120	0.000	2 2 2	
- etrachioroethens	12/-16-4	6	-	a	200	0.50	0.00	200	0.00	0.0026	0.0022	2100 0
rousie 2 Oktobaryamana	100-00-3	50	1000	1000	084	0.56.0	083 U	0.63		0.0030	0.0021	0.0072
trans-1,3-Dichloropropene	10061-02-6	_	-	s i	0 149 0	D 850	O E3 0	0.63 U	0.63 U	0 0056 U		0 0054
Trichlorgethene	79-01-6	1	23	54	0.64 U	L 95 J	063 U	0.63 U	0.63 U	0 0056 U	- 1	00054
Trichigrofluoromethane	75-89-4	NA	NA.	Š	0.64 €	0.56 1	0 63 U	0.63 U	0.63 U			
Vinyl Acetate	108-05-4	\$ \$	NA NA	, 3	1.3 U	110	120	120	12 0			
(Vinyl Chloride	75.01	ĕ	20	7	0.64 &	0.56.0	0 65 0	0.63 0	0.63	0 0056	0.0053	ð

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NUCEF have treaty Department of Environmental Protection mgAg Meilgrants and Klograms, equivalent to parts per million U. Not established all the POL.

J. Analyte detected below POL and/or estimated concentration NA McAndalade.

reconstance
Shaded value exceeded the NJDEP readential solidearup criteria
Shaded value exceeded the NJDEP impact to ground value soil cleanup criteria

Newark, New Jersey	Port Newark	Naporano and Hugo Neu Facilities	Summary of Volatife Organic Compounds Soil Sampling Results	Table 2

Clinat Sample D		NJDEP	Q BOLL	N IDEB	SB 20 2.7 5	SB-SC 3 &	SB-600-5	SB-50 3.5-4	SA-5F0 5-1	SB 5F 7 6.3	3 4 3 35 43	SB SE 9 6.10	2000	20 14 5 5 5
Sampling Depth (ft)		Impact to	Residential	Non-Residents	1-2.5	4.5.4	0.5	3.6.4	2		5-15-15-15-15-15-15-15-15-15-15-15-15-15	9.1-10	1.1.5	55-6
Veritech Sample ID:		Groundwate?	Direct Contact	Direct Contact	AA90516	AA90517	AA90578	AA90529	AA90518	AA90519	AA90520	AA90521	AA90524	AA90525
Sampling Date:	Ę	Soil Cleanup Criteria	Soil Cleanup Criteria	Soil Cleanup Criteria	6/21/1999	6651,ftZA	6/2/0/1999	6/25/1999	629/1529	6551,EZ/9	6/Z3/1989	6/23/1999	6/24/1999	6/24/1899
1 4 1 Tarbianathasa	71.55.6	S	OFF	ADDA S	28.1	0.81	0.50 ()	0.58 11	0.5%	0817	11 90 0	200	2.5	No. in
1,1,2,2-Teirachioroelhane	79-34-5	1	34	70	080	0.67 U	0.68.0	0.58 U	0.54 U	061 U	0.85 U	0 61 0	0 58 U	0 58 0
1,1,2-Trichordethane	79-00-5		22	420	0.6 U	0.61 ∪	0 68 ∪	D 85 0	0540	0.61 U	บ 69 บ	0.81 U	D.58 U	2
1,1-Dichloroethane	75-34-3	10	570	1000	0.6 U	0610	0.55 U	0.58 (0.54 U	0.61 U	0.65 U	061 0	0.58 U	م د ا
1,1-Dichloroethene	75-35-4	10	80	150	0.6 U	0610	U 650	0 58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.54 U	0.50 U
1,2-Dichlorobenzene	95-50-1	8	5100	10000	0.6 U	081 U	0.59 U	0.58 U	054 0	061 U	0.65 U	0.61 U	0.58 U	0.50.1
1,2-Dichloroethane	107-06-2	_	6	24	0.50	D 61 U	0.59 ∪	0 56 U	0 150	0.81 U	0 85 U	061 U	0.58 U	U 85 0
1.2-Dichloropropane	76-67-5	Š	ಶ	43	06 C	081 0	0 59 0	0.56 U	د د د	0.51 U	0.65 U	0610	0.56 L	0.58 U
1.3-Dichlorobenzene	541-73-1	100	5100	10000	060	061 0	0.59 U	0.58 U	0.54 C	0.61 U	0 65 U	0 63 U	0.58 U	0.50 U
1,4-Dichlorobenzena	106-46-7	190	570	10000	06 -	0.61 U	0 59 U	0.58 (0.54	0.61 U	065 ∪	0.61 U	0.58 U	O 58 U
2-Bulanone	78-93-3	8	1000	1000	3 U	31 U	29 ∪	29 1	27 U	3.1 U	3.3 U	3 U	2.9 U	29 U
2-Chioroethylvinylether	110-75-8	NA	N»	NA T	060	0 81 U	0.59 U	0.58 U	054 U	0.61 (0 85 U	0.61 U	0.58 U	0.56
2-Hexanone	591-78-6	NA.	NA.	NA	2.4 U	240	240	2.3 U	2.2 U	240	2.6 U	2.4 U	2.3 🗓	2.3 U
4-Methyl-2-Pentanone	108-10-1	50	1000	1000	2.4 U	2.4 0	24 U	2.3 U	22 (240	26 U	24 0	23 U	2.3 U
Acetone	67-64-1	100	1000	1000	24 U	24 U	2.4 U	2.3 0	7 Z Z	2.4 U	280	24 U	7.3 ∪	2.3 U
Acrolen	107-02-8	 	N.	N.	180	180	i c	170	160	1.0	2	100	170	17 U
Accyconating	19/-191			0	120						1	0 7.1	72.0	1.2 U
Benzene	1143.4	 -	: "	13	0 12 0		012.0	0 2 0		9120	013.0	0 12 0	0120	0120
District Contract April	13.67		\$ - - -	90	2 6	200	2 2	200	2 2 2		0.00	0.01	0 00 0	0.50
0.000		.[.	100	3/0		2 6	0.00	0 80	2	200	200		100	0.00
Carton Disultate	74.05.9	Na -	à à	1000	0.0	200	0.50	258	254	0.61	200	0.61	000	0.58
Carbon Tetrachlonds	56-23-5	_	2	•	0.6 U	0.61 U	0 59 U	0 88 0	0.54 U	0.61 ∪	065 0	061 1	0.58 U	2 2
Chiorobenzana	108-90-7		37	680	0.80	0 61 U	ว 88 ต	0 58 U	0.54 U	0.61 U	0.65 U	061 1	0.58 U	0 56 0
Chloroethane	75-00-3	NA	×	NA T	0.80	0.81 U	0.59 (0.58 0	0.54 0	0.61 U	0.65 L	0.61 U	0.56 U	g.58 U
Chloroform	67-65-3	1	19		0.80	261 U	0.59 U	0.58 U	0.54 U	0.61 U	0 B5 U	0 81 U	0.58 U	0.50
Chioromethane	74-87-3	10	520	1000	0.60	061 U	0.59 U	0 58 U	0.54 U	D81 U	0.34 J	0 61 U	0.58 U	0.58 ∪
	156-59-2	-	79	1000	3.8 U	0.61 U	0.58 U	0.58 U	0 34 0	061 U	0.65 U	0 61 U	0.58 U	0.50 U
•	10061-01-5	_		5	0.6 U	0.61 (0.59 ∪	3.56 U	0.54 U	0.61 U	0.65 U	0,81 U	0.58 U	0.58 U
	108-20-3	NA.	×	NA.	06 U	0 61 U	0.59 U	0.58 U	054 U	0.61 U	0.65 U	0.61 U	0 58 U	0.58 U
Dibromochloromethene	124-48-1	 - -	110	1000	0.6 U	061 U	D 59 U	0 82 0	0.54 U	0.81 U	0.65 U	0.61 U	0.58 U	0.58 ∪
Ethylbenzene	100-41-4	100	1000	1000	0120	0 12 0	0.12 U	012 0	34	012 0	013 U	0120	0 12 U	D 12 U
M&P-Xylenes	108-38-3	67	410	1000	0.23 J	0.24 U	0.24 U	D 23 U	7.8	027	0.26 U	0 24 U	0 Z3 U	0.23 U
Methyl-t-busyl ether	1834-04-4	*	Z	N.	0 12 U	0.20	012 U	0120	0110	012 0	013 0	012 U	0 12 0	0 12 U
Methylene Chloride	75-09-2) -	ŧ	210	0.90	061 (048	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.50 U	0.58 U
O-Xylene	95-47-6	67	410	1000	0 12 U	0 12 U	0120	0120	27	0.12 0	9130	0120	0120	0 12 U
Shurane	100-42-5	100	23	97	012 U	012 U	0.49	012 🗆	0.7	0 12 U	913 U	0 12 U	0 12 U	0 12 U
H-Butyl Alcohol	75-65-0	NA A	NA.	NA	120	12 1	120	1.2 0	110	120	1.3.0	1.2 ()	1.2 U	120
Tetrachloroethene	127-18-4]	4	6 1	0 29 J	0 61 U	D. 98.0	0 58 U	0 77	115 J	0 85 U	0610	0.58 U	0.58 U
Toluene	108-88-3	500	1000	1000	014	012 U	0.12 U	0 12 U	0.22	810	0131/	0 12 U	0 12 U	U 21 0
trans-1,2-Dighloroethene	156-80-5	50	1000	1000	0.6 U	0 81 บ	0.59 U	0.58 ∪	0.54 U	0.61 U	0.65 U	0.61 U	D 88.0	0.58 J
trans-1,3-Dichloropropene	10061-02-6	-			0.6 U	0 61 U	0.59 U	0.58 U	0540	0,61 U	0 65 U	D 61 U	0.58 U	0.58 ப
Trichlorgethana	79-01-6	 - 	23	54	080	061 U	0.59 U	058 0	054 U	0.61 U	0.85 U	0.81 U	0.50 U	0 S8 U
Trichloroflucromethane	75-69-4	N.	N.A	NA NA	0.5 U	0.81 0	0.38 7	0.50 U	0.54 ⊔	061 0	0.65.0	0.61 U	0.58 U	0 58 U
Vinyl Acetate	108-05-4	NA.	××	2>	120	120	120	120	1	120	130	1.2 U	120	1.2 U
Vinyl Chloride	75-01-4	10	2	7	0.B U	061 0	0 59 U	0.58 U	0 54 0	0.61 U	085 U	0.61 U	0.58 U	0.58 0

9 2

9/23/2002

letected below PQL and/or estimated concentration

Table 2
Summary of Volatile Organic Compounds Soil Sampling Results
Naporano and Hugo Neu Facilities
Port Newark
Newark, New Jersey

The Property of	/Invi Arminia	Trichlorofluoromethans	Trichloroethene	nans-1,3-bichloropropene	ans-1,2-0ichloroethens	olume	Tetrachiorosthene	t-Butyl Alcohol	Syrene	2-Xylene	Asthylene Chloride	Mathys-t-butyl ether	М&Р-Хутелез	mylbenzene	Xbramochkoromethane	.sopropyl-ether	J-Dightoropropene	-Dichlamethene	omethane	mot	ethane	robenzane.	Jarbon Tetrachlonds	Jarbon Disulfide)rpmomathane	Bromaform	Bromodichloromethane	lenzena	Covionitrite	vcrolein	A-Mathyr-2-registersons	Regionore	-Chlaraethylvinylether	12-Bulanone	1 4-Dichlorobenzene	, .3-Dichlorobenzene	2-Dichioropane	2-Dichloroethene	0. 2. Okthoroberzene	1 1 Dichemelhana	1-Dichlorpethere	10 Turbundana	n 1,1-inchloroemana	1 1 Tachlartathan	_inter	ampling Date:	Sertion Semple ID:	Client Sample (0:
	108-05-4	75-69-4	79-01-6	10061-02-6	156-60-5	108-86-3	127-18-4	75-65-0	100-42-5	95-47-8	75-09-2	1534-04-4	108-34-3	100-41-4	124-48-1	106-20-3	10051-01-5	156-59-2	74-87-3	67-66-3	75-00-3	108-90-7	56-23-5	75-15-0	74-83-9	75-75-2	75-27-4	71-43-2	107-13-1	107-02-8	100 TO	291-70-0	110-75-8	78-83-3	106-46-7	541-73-1	78-87-5	107-06-2	95-50-1	Ž	75-34-3	3	1100	74.56.6	Number	CAS		
	2	×		 	50	500	1	Z-	100	67	1	NA	67	100	_	≩	-	_	ā	_	NA	-	_[¥	1		_	4	_	×	100	S	×	8	100	100	Ą	-	g 	Š	ā		- z	5	mg/kg	Soil Cleanup Criteria	Greundwater	NJOEP
	NA.	2	23		1000	1000	•	NA.	23	410	49	NA.	410	1000	011	AN	+	82	520	19	××	37	2	N.	79	86	11	3	_	×.	1000	1000	NA	1000	570	5100	io	в	5100	2	570	3 4	210	240	mg/kg	Soil Clasnup Ortaria	Direct Cordact	NJDEP
	2>	¥	54	5	1000	1000	o	NA.	97	1000	210	NA	1000	1000	1000	N.	ı,	1000	1000	28	NA	289		NA.	1000	370	46	13	on.	N _A	100	1000	***	1000	10000	10000	43	24	10000	150	1000	3	100	000;	mg/kg	Soll Cleanup Criteria	Direct Contact	NJOEP
	1.2 U	080	060	08 0	0 6 U	0 12 0	080	121	0120	0 12 0	0.8 บ	0120	0.24 U	012 U	0.60	0.80	0.60	06 🗆	0.6 U	0.6 U	060	060	0.80	0.60	0.6 U	0.5 U	0.6 U	0 12 U	12.0	á	240	240	06 0	30	0.60	0.6 U	0.6 U	080	060	0.0	060		200	0.00	mq/kg	6/23/1999	AA90503	5812-7.5
2	130	0.65 U	0 65 U	0 65 U	065 U	0.13 U	0.65 U	1.3 U	0 13 U	0 13 U	0 65 U	013 U	0.26 U	0 13 U	0.65 U	0 65 U	0.65 U	0 88 U	D.65 U	0 65 U	0.65 U	0.65 U	0 85 U	065 U	0.65 U	0.65 U	0 65 U	0 13 U	13 (- Q-1	28.0	7.50	0 65 (3.2 U	0 65 U	0.65 U	0.85 (0.65 U	085	25.	0 65 0	000	0.55	0.66	mg/kg	6/21/1999	AA 90504	SB1 0.5-1
	17 U	0.83 U	0.83 U	0 83 U	0 83 U	0,17 U	D 83 L	17 U	Q 17 U	0.17 U	0.83 U	0 17 U	0.33 U	0 17 U	n 880	0.83 U	0.83 U	U 88.0	0.630	D.83 U	D.83 U	0.83 U	0.83 U	O EB'D	0.83 U	0.83 U	0.83 (U 710	17 U	2.5 U	330	3.3 (0.83 0	420	083 ∪	0.83 U	0.83 U	0.63 U	0 240	0.83 U	083 U	0.00.0	200	11 58 0	mg/kg	8/23/1999	FV30802	SB2 1-1.5
200	120	0.59 U	0.59 U	0 59 U	0.59 U	0 12 U	0.59 U	1.2 U	D 12 U	0 12 U	0.59 U	0 12 U	0.24 U	0 12 U	0.59 U	0.59 U	O 65.1	O 59 O	0 59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 ∪	D.59 U	O 65 0	0.59 U	0 12 U	1.2 U	180	2.4 U	24 U	34 1	3 0	0 59 U	0.59 U	4 59 U	U 65 0	0.59 U	0.59 U	0.59 U	0.50	200	0.59 11	mq/kg	6661/12/9	AA90506	\$BZ 3-3.5
-	120	0 62 U	0 62 U	0.62 U	0.62 U	0.12 U	0 62 U	1.2 U	0 12 U	0120	0 62 U	0 12 U	9 25 U	0120	0.62 U	0.62 ∪	0 62 Ü	0.62 U	0 62 U	9 62 U	062 -	0.62 U	0 62 U	0.62 U	0.52 U	2 62 U	0 62 U	0 12 U	12 U	190	25 U	0 P	0.62 0	310	0 62 U	0.62 U	0 62 U	0 62 U	0 62 U	0 62 U	0 52 U	0.62	0 60	0 B2 U	mg/kg	6/23/1999	AA90807	SB3 1-1.5
2	146	0.68	0.68 U	0.68 U	0 68 0	0140	0.68 U	1.0	0140	0140	0.68.0	0.14 U	0 27 Ü	014 0	0 88 U	0 68 U	0.68 U	0.68 U	0.68 U	0.68 L	0.88 (0. 56 U	068	0 68 U	0 68 U	0.68 ∪	0.65 U	0 14 U	1.4 U	2 U	270	27 U	3.7	340	0.68 0	0.68 U	0.63 U	0.88 U	0.68 0	0 66 U	0.66 (0.50	0.69	0.63 L	mg/kg	6/23/1999	#490508	383 3-3.5
200	160	081 0	0,81 0	081 (0.81 U	0 16 U	0.71 J	160	0 16 U	0 16 L	0 ti U	0160	0.32 U	0 16 U	0810	081 น	0.81 U	0 B1 U	0 81 0	0 8 1 U	0.81 U	0 &1 U	D.85 U	041 0	0.81 U	0.81 U	0 B1 U	0.16.0	160	2.4 U	320	3210	0 85 0	è	0.81	0.81 U	0.81 U	0.81 U	081 U	0.81 1	0.91 U		200	0.91	mg/kg	6/23/1999	AA90509	SB-5A 0-0.5
2	1. C	0 \$4 0	0.56 U	0.54 U	0.54 U	0.16	0540	110	0 11 U	0110	0.54 U	0110	r 210	0.11 (/	0 54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0 54 U	0.54 U	0540	0.54 U	0 25 0	0.54 U	_ 011 U	11	180	220	220	0 24 0	27 U	1 145 0	0 22 0	0.54	0.54 U	0.54 U	25.0	0.54	2 2	2 2	2	rngtkg	6/23/1999	AA96510	SB-6A 1.5-2
200	120	0.61 U	0.61 U	0.81 U	0.61 U	0 12 U	061 U	12 U	0120	0 12 U	0.61 U	0 12 U	D 24 U	0 12 U	0.81	0.61 U	O 63 U	0.61 U	N 190	U 190	0.61 U	0 61 U	061 U	0 61 U	0610	n 190	0.61.0	0.210	1.2 U	180	240	3 4 0	D.61 C	310	0.61 U	0 61 0	0.61 U	0.61 U	0.61 V	26.	0.61 U	0.01	200	0.63	mg/hg	6/2 3/1999	AA90511	SB-\$A 2.5-3
0 86	170	0 85 U	0 85 15	0.85 U	0 85 12	0 17 U	0.85 U	171	0 17 U	0170	0.85 U	0 17 U	0.94.0	0 17 U	0.560	0.850	0.850	0.85 U	0.85 ∪	0.85 U	0.85 U	0.85 ∪	0.85 U	0.85 U	0.45 U	0.850	0.85 0	0 17 U	176	2.5 U	341	3,0	0 85 U	4.2 U	0.85 U	0.65 (0 85 U	0 85 U	0.85 U	0 85 -	0.85 0	200	200	0.85	mq/kg	6/23/1599	AA90512	SB-5A 6.5-7
2	1.3 U	1 1 1	064 U	0840	0.64 U	0.22	0.64 (130	1.8	0130	0.54 ∪	0 13 0	0 25 U	0 13 0	0,64 (0.6r C	0.04	064	0.54 U	0.880	n 1990	064 U	0.64 U	0.64 U	0.84 (064 [0.64 0	0 13 U	130	190	25.5	2,00	064 0	320	0.64 U	064 U	200	9	0 64 0	2	0 0	0.04	0.04	2	mg/kg	6/23/1989	AA90513	SB-58 0-0.5
	1.3 U	0 150	0.64 U	0.64 U	0 84 0	0.75	0.26 J	130	0.5	17	0.64 U	0130	2.5	074	D 149.0	200	- P	200	0 g4 U	0.64 U	0.64 ∪	200	24.0	0.64 U	084 U	0.64 U	0.64 L	013 U	1	191	220	250	0.84 U	12 U	064 U	064 ∪	064	064	2 2			0.04	000		_			SB-68 2.5-3
1	7		7	Ī		1		7		1		1	1	1		1	Ī	1		j	٦	1	7	1	1	1	1	7	1	7	T	T	Ī	H	1			t	1	1	1	t	t	1		Д		SB

3 of 5

Bolded value exceeded the NJDEP imped to ground waiter to kicleanup criteria	Sheded value exceeded the NJOEP residential soil cleanup colona	NA NOI Available	J Analyte detected below PQL and/or estimated concentration	U Not delected at the PQL	THE STREET OF THE CHEST OF CARBILLIANS CONTRACTOR
up chieria					

		NIDED	N IOSO	N DCD	1 3 t/2 mm	7.3 LC (III)	LIWIZ A	L.S. P.J.WIR	MW.CES.1	* 2 % - Will	2000	2.22.40	0.00	7.9 4.7 %	70 cm	200
Sample D:		NOCE TO	dendential	Non-Read antial	# 20 O	May 1.30-4	1.5-2.0	6.5.5	1.00	34.5	0.1	1.0.5 1.0.5	0-1	14.5	77.0	N. 6723
Jerifyth Semaia ID:		Groundwater	Direct Contact	Direct Contact	AA90435	35,0044	AA90437	AA90418	AA9931	AA90532	C150877	A \$05.14	AA90535	AA90536	AABOJIS	1000
ampling Date:	CAS	Soll Cleanup Criteria	Soil Cleanup Criteria	Soil Cleanup Cateria	6/23/1999	6/23/1999	6/21/1999	6/23/1899	6/24/1999	8/24/1999	6/24/1999	6/24/1958	6/24/1999	6/24/1999	6/22/1999	6/23/1599
Jnits:	Number	rrig/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	6x/film	mg/kg	mg/kg	mg/kg	PAREL.	mg/kg	mg/kg	EX/DEL
1.1.1-Trichloroethane	71-5 5- 8	02	210	1000	0.88 U	0.67	D.69 U	0.69.0	0.59 บ	0.62 U	0.57 U	960	0.61 U	0.57 U	063 U	0.63 U
1,2,2 Tetrachlorosthane	79-34-5		34	70	0.88 U	0.67 U	D 69 G	0 69 U	U 85.0	0.62 U	D 25 0	0.6 1	0 61 U	0.57 U	0.63 U	0 E3 U
1,2-Trichloroethane	78-00-5	1	22	420	J.68 U	0.67 ∪	0.69 U	0.69 U	O.59 U	0.62 ∪	0.57 U	0.6 U	0.81 U	0.57 ∪	0.63 ∪	0.63 U
1-Dichloroamane	75-34-3	10	570	1000	0.830	D 67 U	0.69 U	0.68 U	0.59 ∪	0.62 U	0 57 U	0.60	0.61 U	0 57 U	0.63 U	0.63 0
7. 1-Dichloroethena	75-35-4	10		150	0 88 0	0.67 U	0 89 U	0 69 U	0.59 U	0 62 U	0.57 U	080	0 61 U	0 S7 U	0.63.0	063 U
1,2-Dichlorobenzene	95-50-1	02	5100	10000	0.68 U	0 67 U	0.69.0	0.69 U	0.59 L	0.52 ∪	a 57 U	0.6 U	061 U	0.57 U	0.63 U	063 U
,2-Dichloroethane	107-08-2	1	6	24	U 89 0	0.67 U	ວ 69 ປ	0.59.0	0. 59 U	0.62 U	0 57 U	080	0 61 U	0.57 ∪ }	0 63 U	063 년
2 Dichloropropane	76-87-5	NA.	10	- 43	0.68.0	0.67 U	₽.89.U	0.69 ∪	0.59 U	0 62 U	0.57 U	080	0 61 U	0.57 U	0.63 U	0.63 ⊔
ii.,3-Dichlorobenzene	541.73-1	300	5100	10000	D 89 0	D 67 U	0 69 0	0 69 U	0.59 U	0 62 U	0.57 U	080	0 61 U	0.57 U	0.630	0.63 (/
1,4-Dichlorobanzana	1D6-46-7	100	570	10000	D 88 G	0.67 U	0 69 U	0.69 ∪	0.59 ∪	0.62 U	0.57 U	060	0 61 U	0.57 ()	0.63 U	0.83 U
lo-Butanone	78-83-3	. 09	1000	1000	1 1 €	340	3.5 ()	3.5 U	3 ∪	310	2.9 U	3 0	310	28 U	310	310
-Chioroethylynnylatner	110-75-8	NA -	NA	NA	0.680	0.67 U	0.69 U	0.68 U	0.59 U	0.62 ∪	0.57 U	040	0 61 U	0.57 U	0.63 U	0 63 U
-Hexanone	591-78-6	٩N	AN	V.	2.7 U	27 U	28 U	2.8 U	2.4 U	2.5 U	23 ∪	2.4 U	244	2.3 U	2.5 U	2.5 U
14-Methyl-2-Pentanone	108-10-1	. 98	1000	1000	270	2.7 U	2.8 U	280	2.4 U	250	21 U	240	2.4 U	2.3 U	2.5 U	2.5 (
Acatore	67-64-1	001	1000	1000	27 U	2.7 U	2.8 ∪	2.8 U	2.4 U	24.5	2.3 ()	240	2.4 U	2.3 U	2.5 U	U 5.5
'Acrollen	107-02-0	A.N	NA.	χ.	20	2 0	21 U	210	180	191	170	180	180	170	180	190
crytonitrile	107-13-1	1	1	5	1.0	1.3 U	14 U	1	1 2 U	1.2 🗆	1.10	120	1.2 U	- - -	12 0	1,2 U
enesne.	71-43-2	1	[3	13	0140	013 12	017	011	0120	0 12 0	0 11 0	0.12 0	0.26	0110	013 -	0130
Bromodichloromethane	75-27-4	1	11	46	D.68 U	0 67 U	069 U	0.69 U	0.59 U	0 62 0	0.57 (080	0.6% U	0 57 U	0.63 U	083 ∪
Bramoform	75-25-2]	8	370	0.88 ∪	0.67 U	0.69 U	0 69 0	0 59 0	0 62 0	0.57 U	0.6	061 0	057 (063 U	063 U
гототейнай	74-83-9	1	79	1000	0.68 U	0 67 U	0.69 ()	0 89 0	0.59 U	0.62 0	0.57 0	n 3 0	081 U	057 U	0.63 U	D 63 U
arbon Disumos	75-15-0	NA.	Ä	2	0.68 U	0.67 U	0.69.0	0.88.0	0.59 0	0.02	0.57	000	061	0.57 U	200	0630
artion Tetrachloride	56-23-5		2		0880	0.67 U	0.89 U	0.09.0	980	0 200	05/0	2.0	061	057 0	0.63 (0 63 0
P CODECIZEDE	108-90-7		37	890	0 88 0	0.67 ()	989	0.59	0 59 0	0 0 0 0	057	0.5 0	261	0.57	063 U	0.63
form	67-96-1	- 5	10 5	36 3	0.88	0.67 U	0 88 0	0 88 0	0 59 U	0.62 U	0.57 U	0.6 U	0 65 4	0 57 U	0.02	0 60 0
omethan.		ŝ	900	1000	200	0.57	260	0.69 U	0.59 U	0.62	2.57 U	0.0	2 2 2	0.57		2
2-Digniorsethens	156-59-2		79	1000	0.880	0.67 U	D. 68.0	0.89 U	0.59 U	0.62 ∪	0,57 U	0.6 U	0.61 U	0.57 U	0 63 0	0 60 0
-Dichigropropene	10061-01-5	1	٠	ဟ	D 88.0	p.87 U	U 89.0	0.69 U	0.59 U	0.62 U	0 57 U	080	0.61	0 57 U	0.83 U	0.63 (
Joropyl-ether	108-20-3	ΝÀ	N.	N.A	0.88.0	0 67 U	0 89 U	0.69 0	0.880	0.62 U	0.57 U	0.8.0	0.61 U	0.57 U	0.63 U	0-63 U
ibromochloromethane	124-48-1	1 _	110	1000	∩ 89.0	0 67 U	0.59 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0 63 0
thylognzene	100-41-4	100	1000	1000	0 14 0	013 U	0 37	0140	0.12 U	0 12 U	013	0 12 U	0.81	0110	0 13 U	0 13 U
M&P-Xylenes	108-38-3	67	410	1040	0.34	0.27 U	0.33	0.28 U	0150	0.25 U	0.36	D.24 U	3.6	0 23 U	0.25 U	0 25 U
Mathyl-Loutyl ether	1634-04-4	NA.	NA	NA.	0140	013 U	014 U	014 U	012 U	012 U	0110	0.12 U		0 15 U	0 13 U	0 13 U
Asthylene Chloride	75-08-2	1	49	210	0.68 U	0 67 V	0.59 U	D 89 C	0.59 U	0.62 U	0.57 U	060	0 61 U	0.57 U	0 63 U	0 63 U
>-Xylene	05-47-B	67	410	1000	0140	013 U	014 U	0 14 U	0 12 U	012 0	0.2	0 12 U	1.6	0110	0 12 0	0 13 U
утеле	100-42-5	100	23	97	0.35	0 61 0	0.65	0 14 0	0120	0120	011 0	0.12 U	3.2	011 U	013 0	0.13 U
R-Butyl Alcohol	75-65-0	NA	AA	NA.	140	1.3 U	140	1.40	120	1.2 U	110	120	12 1	110	1.2 U	120
Metrachionoethene	127-18-4	_		Gi	0 16 J	0 67 U	0.69 U	0.69.0	0.59 U	0 62 U	0.57 U	08.0	061 U	0.57 U	0.63 U	263 D
oluene	108-88-3	500	1000	1000	0 15	013 U	0.42	0140	0.21	012 U	0.2	D.12 U	3.2	011 U	0 13 U	0130
ans-1,2-Dichloroethene	158-60-5	50	1000	1000	0.68 U	0.87 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.B1 U	0.57 U	0.83 U	0.63 U
jurans-1,3-Dichloropropens	10061-02-6	1		5	0.68 U	0.67 U	0.69 U	0 69 U	0.59 U	0.82 (0 57 U	0.8 ∪	0.61 U	0.57 U	0.63 U	0.63 U
Trichloroathene	79-01-6	1	23	Sal	0.68 U	0.67 ∪	0,69,0	0.69.0	D 53 U	0.62 U	0 57 U	0.80	0.61 U	0.57 U	0.63 U	0.53 U
"richlorofluoromethane	75-89-4	ai a	NA.	N.	0.69	D 67 U	0.89 U	O 69 0	บ 88.0	0 82 U	0 57 U	0.6 U	0 F1 U	0.57 U	0.63 D	0 63 0
my Acetale	100.05		NA.	NA NA	1.4.0	110	1	1	120	1,2,0	110	120	1.2 U		120	120
	F TOUTOUT	NA S				100										

Client Sample ID:		NJDEP Impact	NJDEP	NJDEP	MW-N2	MW-N2	BH-N5F	BH-NSF	BH-N1	BH-N1	MW-C1 S-1	MW-C1 S-2	MW-C2 S-1	MW-C2 S-4	MW-C3 S-1	MW-C3 S-4
"Sampling Depth (ft)		to Groundwater	Residential	Non-Residential	0.5-1.5	4,5-5.0	0.5-2.0	6.0-8.0	0.5-1.5	4.0-4.5	1.5-2.0	3-3.5	1-2	6-7	1.5-2.0	6-7
Veritech Sample ID:	}	Soll Cleanup	Direct Contact Soil	Direct Contact Soli	AA94324	AA94325	AA94655	AA94656	AA94149	AA94150	AA90433	AA90434	AA90327	AA90328	AA90435	AA90436
Sampling Date:	CAS	Criteria	Cleanup Criteria	Cleanup Criteria	8/27/1999	8/27/1999	9/2/1999	9/2/1999	8/25/1999	8/25/1999	6/23/1999	6/23/1999	6/22/1999	6/25/1999	6/23/1999	6/23/1999
Units:	Number	mg/kg	ma/kg	mq/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	7440-36-0	NA .	14	340	9.2	1.4 U	1.4 U	1.4 U	22	1.4 U	130	1.4 U	5.2	1.4 U	₹ ≤14 T	1 4, U
Arsenic	7440-38-2	NA NA	20	20	2_U	2 U	3.1	2 U	14	2 U	1.9	2 0	14	2 U	10	2.5
Barium	7440-39-3	NA_	700	47000	180	6.5	100	20	420	9.7	12	. 6	240	9.3	340	6.2 U
Beryllium	7440-41-7	NA		2	0.19 U	0.19 U	0.19 U	0 19 U	0190	0.19 U	0 18 U	0 19 U	0.2 U	0 19 U	0.2 U	0.2 U
Cadmium	7440-43-9	NA NA	39	100	21	031 U	1.2	0.31 U	22	0 31 U	0.3 U	0.32 U	6.4	0 32 U	12	0.33 U
Chromium	7440-47-3	NA NA	500	500	220	39	37	13	150	7	7.4	4.8	130	9.9	190	5.5
Copper	7440-50-8	NA	600	600	680	<u>5.</u> 9	100	28	900	8.5	24	8.3	430	6,1	490	79
Lead	7439-92-1	NA .	400	600	690 ***	15	± . 410	60	3000	22	30	11	`` 570 ±	7.9	1400 A	3.1
Marcury	7439-97-6	NA	14	270	3.7	0.11	1,4	0.17_	. 10	0.034 U	0.055	0.084	0.47	0 03 U	37	0.033 U
Nickel	7440-02-0	NA .	250	2400	120	4.3	33	30	430	8	10	5.5	110	11	180	6.4
Selenium	7782-49-2	NA NA	63	3100	2.9 U	2.8 ∪	2.8 U	2.8 U '	2.9 U	2.8 U	2.7 U	29 U	3 U [2.9 ∪	3 Ų	3 U
Silver	7440-22-4	NA	110	4100	1.3 U	12 U	120	1.2 U	19	1.2 U	1 2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Thallum	7440-28-0	NA_	2	2	1,1 U	_1 U	1 U	1 U	1,1 0	1 0	1 U	110	1.1 U	110	1.1 U	1.1 U
Zinc	7440-66-6	NA _	1500	1500	1100	35	410	110	24 2900 A	26	94	53	130D	19	17006	20 U
Cyanide	57-12-5	NĂ	1100	21000	0.27 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U	0.25 U	97	0.28 U	0.27 U	77	9.7
Phenol	103-95-2	50	10000	10000	130	1.3 U	1.3 U	1,3 U	1.3 U	1.3 U	1.3 U	<u>.</u> 3 U	1.4 U	1.3 U	14 U	10
° ¹₁ds		NA NA	NA NA	NA	93	96	96	96	93	96	99	94	89	94_	91	<u> </u>

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Value exceeded the NJDEP rion-residential soil cleanup criteria

Page 1 of 5

Client Sample ID:		NJDEP Impact	NJDEP	NJDEP	SB-4A 1.0-1.5	SB-4A 5.5-6	SB-4B 0.5-1	SB-48 5.5-6	SB-4B 5.5-6	SB-4B 5.5-6
Sampling Depth (ft)		to Groundweter	Residential	Non-Residential	1-1.5	5.5-6	0.5-1	5.5-6	5.5-6	5.5-6
Veritech Sample ID:		Soil Cleanup	Direct Contact Soil	Direct Contact Soil	AA90524	AA90525	AA90526	AA90527	AA90527	AA90527
Sampling Date:	CAS	Criteria	Cleanup Criteria	Cleanup Criteria	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999
Units:	Number	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	7440-36-0	NA NA	<u>}</u> 14	340	1,7	13 U	16 -	1.4 U	NR	NR
Arsenic	7440-38-2	NA NA	20	20	3	1.9 U	14	2 U	NR	NR
Barium	7440-39-3	NA NA	700_	47000	46	6	520_	5.8 U	NR	NR
Beryllium	7440-41-7	NA	2	2	0.19 U	0.18 U	0 <u>.2</u> U	0.19 U	NR	NR
Cadmium	7440-43-9	NA	39	100	0 93	0.31 U	14	0.31 U	NR	NR
Chromium	7440-47-3	NA	500	500	25	4.8	18-01-560 AL	3 3	NR	NR
Copper	7440-50-8	NA NA	600	600	230	4.6	学校1200 美	3 1 U	NR	NR N
Lead	7439- <u>92-</u> 1	NA	400	600	120	16	27 31600 地外	3.1	110	990
Mercury	7439-97-6	NA NA	14	270	0.53	0.03 U	5.8	0.031 U	NR	NR
Nickel	7440-02-0	NA NA	250	2400	22	5.6	D≱+ 300 x4	4	NR	NR
Selenium	7782-49-2	NA NA	63	3100	2,9 U	2 8 U	3 0	2.8 U	NR	NR
Silver	7440-22-4	NA	110	4100	1.3 ∪	12 U	1.3 U	1.2 U	NR	NR
Thallium	7440-28-0	NA NA	2	2	1.1 U	1 U	1.1 U	1 0	NR	NR
Zinc	7440-66-6	NA NA	1500	1500	170	47	2000	19 U	NR	NR
Cyanide	57-12-5	NA NA	1100	21000	NA .	NA	NA_	NA	NR	NR
Phenoi	103-95-2	50	10000	10000	NA NA	NA.	NA_	NA	NR	NR
% Solids		NA	NA NA	NA	NA]	NA NA	NA NA	NA	NR_	NR

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Client Sample ID:	<u>-</u>	NJDEP Impact	NJDEP	NJDEP	\$8-5B 2.5-3	SB-58 7-7.5	SB-5C 2-2.5	SB-5C 3.5-4	SB-50 0-0.5	SB-5D 3.5-4	SB-5€ 0.5-1	SB-5E 2.5-3	SB-5E 6-6.5	SB-5E 9.5-10
Sampling Depth (ft)		to Groundwater	Residential	Non-Residential	2.5-3	7.7.5	2-2.5	3.5-4	0-0.5	3.5-4	0.5 1	2.5-3	6-6.5	9.5-10
Veritech Sample ID:		Soil Cleanup	Direct Contact Soil	Direct Contact Soil	AA90514	AA90515	AA90516	AA90517	AA90528	AA90529	AA90518	AA90519	AA90520	AA90521
Sampling Date:	ÇAS	Criterla	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/25/1999	6/25/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999
Units:	Number	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mq/kg	mg/kg	m o /kg	mg/kg	mg/kg
Antimony	7440-36-0	NA NA	14	340	्र 1.	1, 4 U	100	1 4 U	8.6	2.8	17. 17. 17. 17. 17. 17. 17. 17. 17. 17.	12	3.1	1.4 U
Arsenic	7440-38-2	NA	20	20	为 23° 之	2 U	27.4	2 U	11	3.4	89	13	2.6	2 U
Barium	7440-39-3	NA	700	47000	320	6 U	400		210	48	250	330	34	5.8 U
Beryllium	7440-41-7	NA	22	2	0.2 U	0 19 U	0.19 U	0.19 U	0.19 U	0 19 U	0.2 U	0.2 U	0 18 U	0.19 1/
Cadmium	7440-43-9	NA	39	100	28	0.32 U	6 440 L	0.32 U	9.5	0.67	12	12	1	0.31 U
Chromium	7440-47-3	ΝA	500	500	250	3.3	290	2.5	230	67	23.1100经7	110	16	2.9
Copper	7440-50-8	NA	600	600	© #€700 · · · ·	3 4	2800	6.7	440	120	530	2610	130	3.1 U
Lead	7439-92-1	NA	400	600	2800	3.8	4900	10	730	130	820 4	* 1500	* 460	2.2 U
Mercury	7439-97-6	NA	14	270	3.3	0.032 U	2.5	0.044	2.2	0.49	2.5	4.4	0.049	0 031 U
Nickel	7440-02-0	NA	250	2400	220	36	1900	5.4	150	65	- 630 ·∽`	150	29	3.8
Selenium	7782-49-2	NA	53	3100	3.1 U	2.9 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	3 U	2.8 U	2.8 U
Silver	7440-22-4	NA	110	4100	1.4 U	1.3 U_	1.3 U	13 U	120	1.2 U	1.3 U	1.3 U	1.2 🗓	1.2 U
Thallium	7440-28-0	NA	2	2	1.10	1.1 U	1.1 0	110	1 U	1 0	1.1 U	1.1 U	1 U	1 U
Zinc	7440-66-6	NA	1500	1500	2100	56	6480	77	+ 1500	340	£ 1000 -	18003	310	19 U
Cyanide	57-12-5	NA	1100	21000	NA_	NA	NA	NA	NA	NA	NA.	NA NA	NA I	NA NA
Phenol	103-95-2	50	10000	10000	NA .	NA	NA NA	NA	NA NA	NA	NA	NA	NA NA	NA
% Solids		NA NA	NA NA	NA	NA	AN	NA NA	NA	NA	NA	NA NA	NA	NA	NA

Notes.

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Value exceeded the NJDEP non-residential soil cleanup criteria

Page 4 of 5

Soil Data 9-18-02.xls

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soll Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB1 2-2.5 2-2.5 AA90503 6/23/1999 mg/kg	SB1 0.5-1 0.5-1 AA90504 6/23/1999 mg/kg	SB2 1-1.5 1-1.5 AA90505 6/23/1999 mg/kg	SB2 3-3.5 3-3.5 AA90506 6/23/1999 mg/kg	SB3 1-1.5 1-1.5 AA90507 6/23/1999 mg/kg	\$B3 3-3.5 3-3.5 AA90508 6/23/1999 mg/kg	\$8-5A 0-0.5 0-0.5 AA90509 6/23/1999 mg/kg	SB-5A 1.5-2 1.5-2 AA90510 6/23/1999 mg/kg	SB-5A 2.5-3 2.5-3 AA90511 6/23/1999 mg/kg	SB-5A 6.5-7 6.5-7 AA90512 6/23/1999 mg/kg	SB-5B 0-0.5 0-0.5 AA90513 6/23/1999 mg/kg
Antimony	7440-36-0	NA NA	14	340	14 U	3	14 U	1.4 U	13 U	1,4 ()	3.9	5.5	1.3 U	14 U	₩.₩.X. 50 (\$1.
Arsenic	7440-38-2	NA	20	20	2 U	5.5	2 U	20	1.9 U	2 U	6.6	7.2	1.9 U	2 U	10
Barium	7440-39-3	NA	700	47000	15	100	48	18	41	6.4	170	180	10	8 2	410
Beryllium	7440-41-7	NA NA	2	2	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0 19 U	0.19 U	0 19 U	0 18 U	0.19 U	0.2 U
Cadmium	7440-43-9	NA	39	100	0.31 U	3_{	0.31 ป	0.31 U	031 U	0.31 U	4 1	5.4	0.31 U	0.32 U	20
Chromium	7440-47-3	NA NA	500	500	9	65	25	7.7	20	3 1	53	80	_ 5.5	4.5	170
Copper	7440-50-8	NA NA	600	600	11	250	39	7.6	44	3.1 U	200	210	6.2	5.1	沙溪680 疾
Lead	7439-92-1	NA NA	400	600	68	340	3.1	5.8	7.2	2.2 ∪	1200	850	2.8	3.3	25年1880
Mercury	7439-97-6	NA	14	270	0.12	1.2	0 031 U	0.041	0 042	0.031 U	3.2	2.2	0.03 U	0 091	51
Nickel	7440-02-0	NA NA	250	2400	17	56	19	12	16	6.3	48	56	19	17	170
Selenium	7782-49-2	NA .	63	3100	2.8 U	2,8 U	29 U	2.9 U	_2.8 U	29 U	2.9 U				
Silver	7440-22-4	NA _	110	4100	12 U	1 2 U	1.2 U	120	1.2 U	1,2 U	1.3 U	1,3 U	12U	1.3 U	1.3 U
Thallium	7440-28-0	NA .	2	_ 2	1 U	1 0	1 U	1 U	1 U	1 ป	110	<u>1.1 U</u>	1 U	1.1 U	11 U
Zinc	7440-66-6	NA	1500	1500	39	590	47	24	34	19 U	730	_860	18_U	19 U	办法3500 米 维
Cyanide	57-12-5	NA.	1100	21000	ΝA	NA _	NA NA	NA	NA NA	NA NA	ŅĀ	_ NA	NA	NA	NĀ
Phenoi	103-95-2	50	10000	10000	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Solids		NA	NA NA	NA NA	NA	NA NA	NA	NA NA	NA .	NA NA	NA J	NA NA	NA j	NA :	NA _

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... Value exceeded the NJDEP residential soil cleanup chlena

Value exceeded the NUDEP non-residential soil cleanup chieria

Page 3 of 5 Sori Data 9-18-02.xls

Ctient Sample ID:		NJDEP Impact	NJDEP	NJDEP	MW-C4 \$-1	MW-C4 S-3	MW-C5 S-1	MW-C5 \$-5	PA-C6 S-1	PA-C6 S-5	PA-C7 S-1	PA-C7 S-5
Sampling Depth (ft)		to Groundwater	Residential	Non-Residential	1.5-2.0	5-5.5	1-2	8-8.5	0-1	8-6.5	0-1	8-8.5
Veritech Sample ID:		Soil Cleanup	Direct Contact Soil	Direct Contact Soil	AA90437	AA90438	AA90531	AA90532	AA90533	AA90534	AA90535	AA90536
Sampling Date:	CAS	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999
Units:	Number	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mo/kg	mg/kg	mg/kg	mg/kg
Antimony	7440-36-0	NA_	14	340	- 4430 ·	1.5 U	- 45	1,4 U	1.4 Li	1.5	2	130
Arsenic	7440-38-2	NA.	20	20	3.9	2.4	2.5	2.3	2.6	3.3	5.6	3
Barium	7440-39-3	NA	700	47000	250	20	90	12	22	48	80	7.8
Beryllium	7440-41-7	NA	2	2_	0.21 U	0.21 U	0.19 U	0 19 U	0 19 U	0.19 V	0.19 U	0 19 U
Cadmium	7440- <u>43</u> -9	NA	_ 39	100	お ままず ア	0.35 U	4.5	0.32 U	0.31 U	0.97	1.8	0.31 Ü
Chromium	7440-47-3	NA	500		110g0 S	13_	±1300	14	12	120	54	12
Copper	7440-50-8	NA NA	600	600	5841300	32	190	10	18	75	190	8.8
Lead	7439-92-1	NA_	400	600	1000 C	63	390	10	8.2	200	210	4.8
Mercury	7439-97-6	N <u>A</u>	14	270	5.5	0 18	0 96	0 032 U	0.031 U	0 13	0.79	0.031 U
Nickel	7440-02-0	NA NA	250	2400	4000	15	650	34	9.9	89	58	17
Selenium	7782-49-2	NA NA	63	3100	3 1 U	3.1 U	2.9 U	2.9 U	2.8 U	2.9 U	2.8 U	2.8 나
Silver	7440-22-4	. NA	110	4100	14 U	14U ,	13 <u>U</u>	13 U	1 2 U	1.3 U	1.3 U	1.2 U
Thallium	7440-28-0	NA	2	. 2	120	1 2 Ú	1 <u>1</u> U	1.1 U	1 U	1.1 ปั	1.1 U	1 U
Zinc	744D-66-6	NA	1500	1500	2600	140	980	31	27	310	360	25
Cyanide	57-12-5	NA .	1100	21000	9.7	1.2	0.63	0.27 U	0.26 U	0.57	0.68	0.6
Phenol	103-95-2	50	10000	10000	1,4 U	14 U	1.3 U	1.3 U	2.6	1.3 U	3.7	13 ∪
% Solids		NA NA	NA	NA _	86	86	93	94	96	94	95	97

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Page 2 of 5 Soit Data 9-18-02.xls

Table 7
Summary of Total Petroleum Hydrocarbons Soil Sampling Results
Naporano and Hugo Neu Facilities

Port Newark Newark, New Jersey

_	-		T	7		۳	_		-		7	1							
PA-C7-W1-02	AB47787	12/4/2001	шаука	Z, Z	•	BH-N1:31-02	2.8-3.0	AB47789	12/4/2001	ma/kg									
PA-C7-W1-01	AB47756	12/4/2001	mg/kg	8017		BH-N1-91-01	20-2.6	AB47768	12/4/2001	mg/kg	14								
PA-C7-N1-04	AB4776\$	12/4/2001	Barre			BH-25-47-04	3.54.0	AB47757	12/4/2001	mg/kg	42		BH-K1-K1-Ct	1.54.0	AB47779	12/4/2001	mgikg	∩ %	
3.0-3.5	AB47784	12/4/2001	mg/kg	200		BH-M1-M1-03	3.0-3.6	AB47756	12/4/2001	mg/kg	35		BH-M1-W1-03	3,0-3,5	A847778	12/4/2001	mg/kg	^ *	
PA-C7-M1-02	AB477\$3	12/4/2001	ga/ga/			BH-N1-N1-02	2.0.3.0	AB47768	12/4/2001	#BAg #	J 37 U		BH-W1-W1-02	2.5-3.0	AB47777	12/4/2001	mg/kg	36	
2.0-2.5	AB47752	12/4/2001	5500			BH-N1-N1-03	2.0-2.6	AB47764	12/4/2001	mg/kg	74		BH-N1-W1-01	2.0.2.6	AB47778	12/4/2007	morka	40	
1540	AB47781	12/4/2001		,		PA-C7-E3-04	3.54.0	AB47783	12/4/2001	mg/kg	110		8H41-E1-04	1.6-4.0	AB47776	124/2001	талка	46	
104.5	AB47780	12/4/2601	82			PA-C7-E1-03	3.0-1.9	AB47762	12/4/2001	mg/kg	90,		BH-N1-E1-03	3.0-3.5	AB47774	12/4/2001	mg/lig	41	
2.5-3.0	AB47748	12/4/2007	9600			PA-C7-E1-02							BH-N1-E1-02	2.5-3.0	AB47773	12/4/2007	толка	47	
2.0-2.5	AB47748	12/4/2001	S S S S S S S S S S S S S S S S S S S			PAC7-E1-01	2.0.1.6	AB47760	12/4/2001	mg/kg	54.544000 € € 1		BH-M1-E1-01	20-2.5	AB47772	12/4/2001	mg/kg	3	
PA-CB-E11-05 P.	AB\$7522	5/16/2002	Mg/Mg			PA-C7-W1-04	3.64.0	AB47759	124,2001	ayen.	48		BH-N1-31-04	3,40	AB47774	1247001	mg/kg	3.8	
į.	_	5/16/2002	9			PA-C7-W1-03	3.0-3.8	AB47758	12/4/2001	g/gm	380		BH-N1.51-03	3.0-3.5	ABATTTO	12/4/2001	mg/kg	51	
Non-Residential	Direct Contact Soil Direct Contact Soil	8	10001			NJDEP	Non-Residential	Direct Contact Soll Direct Contact Soll	Cleanup Criteria	mg/kg	10000		NUDEP	Non-Residential	Direct Contact Sou Direct Contact Soil	Cleanup Critigria	Баўбш	10000	
	Direct Contact Soil	Cleanup Criteria	10000			NJDEP	Residential	Direct Contact Soil	Cleanup Criteria	M9/kg	10000		4 JOEP	Residential	Direct Contact Soil	Cleanup Criticals	толе	10000	
Groundwater	Soll Cleanup		Dispose in	I		NJOEP Impact to	Groundweter	Sail Cleanup	Criteria	mg/kg	00001		NJDEP Impact to	Groundwater	Soll Cleanup	Criteria	ma/kg	10000	
		3	026 38 PTG						CAS	Number	23,35-22.0					CAS	Mumber	23135-22-0	
G ent Sample (D: mp()ng Depth (ft)	ttech Sample ID:	mpling Date:			ıt	ent Sample ID.	mpling Depth (%)	ritech Sample ID:	- npling Date:	2	S at Petroleum Hydrocarbons	01	ant Sample ID:	npling Depth (R)	Sample (D:	2 applied Dete:	2	Betroleum Hydrocarbone	0!

Table 7

Summary of Total Petroleum Hydrocarbons Soil Sampling Results
Naporano and Hugo Neu Facilities
Port Newark
Newark, New Jersey

Shi sad 2000 de so.	2	1,000 7	1,	O OF		310	2000		** - * 0000g 1	9	00002	10000	10000		23135-22-0	slai Petroleum Hydrocarbons 23135-22-0
mg/kg	TO DAY	тр/ка	mg/kg	mg/kg	тдле	morkg	mg/kg	mg/mg	mg/kg	mpArg	mgkg	merkti	ma/kg	mg/kg	Humber	nks
\$16,2002	\$16,2002	\$/16/2002		6/16/2002	£/16/2002	472972001	4/29/2062	4/29/2002	4/29/2002	475/2003	475/2002	Cleanup Critisha	Cleanup Criteria	C.Fee	5	A ampling Dete:
AB\$7520	AB57519	AB\$7518	AB57617	AB67516	AB67515	ABMSSB	AB36555	ABJ639	AB\$6553	AB\$6559		Orest Contact Soli Direct Contact Soi)	Olrect Contact Soft	Soil Cleanup		artech Sample ID:
20-3.0	8.4-1.0	0700	20.10	0.9-8.0	2040	8.8-9.0	6.0-6.0	3.04.0	2.0-3.0	8.0-9.5	_	Non-Residential	Residential	Groundwater		H ampling Depth (ft)
PA-C6-E11-01	PA-C8-E10-05	PA-C6-E10-02	PA-C6-E10-01	PA-C6-E9-04	PA-C6-E8-01	PA-CB-E8-04	PA-CE-E8-03	PA-C8-E8-02	PA-C6-E8-01	PA-C6-57-03	PA-C6-57-02	HJDEP	d3QrN	NJDEP Impact to	L	lient Sample IO:
																ne
	110	4 \$300E	-3. 2000	XX000x	12(3) (18 00) July 12	**************************************			. 2 2000 and wife	9	2800	10000	10000		23135-22-0	oral Petroleum Hydrocarbons 23135-22-0
mg/kg	mg/kg	mg/kg	mg/kg		ша/ка	mg/kg	mg/kg	mg/kg	mg/kg	TT-23/kg	movkg	mg/kg	mg/kg		Number	- offs
479/2002	2002/62/7	4/28/2002	479/2002	4/29/2002	479/2002		_		4/29/2002	4734/2002	475/2002	Cleanup Criteria	Cleanup Criteria	Criticals	5 5	C empling Date:
AB56557	AB56562	AB56551	ABS6\$50	AB56549	AB56848	AB56647	AB56546	ABSBMA	AB\$6\$44	AB56543		Direct Contact Soil Direct Contact Soil	Direct Contact Soil	Soil Cleanup		July arteach Sample ID:
2.0-3.0	6.5-8.0	3.0 4.0	2,0-3.0	5,0-9,5	0.0°	2.63.0	9.0-9.5	3.04.0	2.0-1.0	1.0-9.5		Non-Residential	Residential	Groundwater		ampling Depth (ft)
PAC8-37-01	PA-CB-£7-03	PA-C6-E7-02	PA-CE-E7-01	PA-C6-E6-03	PA-CB-E6-02	PA-CE-EG-01	PA-C6-ES-03	PA-C6-ES-02	PA-C6-E5-01	PA.C6-58-03	PA-C6-38-02	NJDEP		NJDEP Impact to	_	Nert Sample ID:
			i J													ο.
	98	8900	(A) 110(D) こここと	**************************************	15000	シャ·※0002年	1 0 2 2 2 2 2 3 2 4 3 4 3 4 3 4 3 4 3 4 3 4	00060	33000	25 2500 1345 F. F. 20000 1110 1110	A. 2000	10000	1000	10000	23135-22-0	U otsi Petroleum Hydrocarbons
mg/ka	make		mg/kg	mg/kg	mg/kg	mg/kg	Ba/kg	mg/l/g	mg/kg	Da/em	mg/kg	_	mg/kg	mg/kg	Number	SHC.
47347002	4/29/2002	4/29/3002	4/29/2002	12/1/2001	12/1/2001	12/1/2001	12/11/2001	12/11/2001	12/11/2001	12/11/2001	12/11/2001	Cleanup Criteria	Cleanup Critaria	Critteria	3	amoling Oate:
18.56547	ARSBEAD	AB\$6839	AB56538	AB48322	AB48321	AB48320	AB48319	AB48326	A648325	AB48324	_	Direct Contact Soil Direct Contact Soil	Direct Contact Sol	Soll Cleanup		artech Sample ID:
2.0.3.0	8 0.0 8	3.0-4.0	263.0	3.54.0	1.0-1.5	2.63.0	20-26	1.51.0	3.0-3.5	2.9-3.0	2.0.2,8	Non-Residential	Residential	Groundwater	_	ampling Depth (R)
PA-C8-36-01	PA-CB-SEA-03	PA-C6-55A-02	PA-C6-35-01	PA-C6-E4-04	PA-C6-E4-03	PA-C6-E4-02	PA-C6-E4-01	PA-C6-34-04	PA-CE-54-03	PA-C6-S4-02	PA-C6-34-01	A SUBER	L	NJDEP Impact to		I ient Sample ID:
									ı							1
T- F- 12 000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	のでは、1400gの東京が15cm	***: Z80000 - **	2-156000 cc. 2	٤ŀ	1.50 1.000 Per 1.000	4	1:0000		35000		13000	10000	10000		23135-22-0	otal Petroleum Hydrocarbons
movka	DA/Rei	mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	тома	mg/kg	€#/6m	mong	md/kg	markg	mg/kg	Number	in the
12/7/2001	12/7/2001	127/2001		12/7/2003	12/7/2001	12/7/2001	127/2001		12/7/201	12/7/2001	127/2001	Cleanup Criteria	Cleanup Criteria	Criteria	0 9	ampling Date:
AB48124	AB48123	AB48121	AB48121	AB44510	AB48116	AB48114	AB48113		A3-48119	AB48118		Direct Contact Soil Direct Contact Soil	Direct Contact Soi	Soll Cleanup	_	entech Semple ID:
2.0-2.5	0.54.0	3.0.0	2.5-3.0	2.0.2.6	3.6.4.0	3.0-3.6	2.5-3.0	2.0-2-8	3.5-4.0	3.0-3.5	2.6-3.0	Non-Residents	Residentia:	Groundwater		ampling Depth (R)
PA-C6-N3-01	PA-C6-S3-D4	PA-C6-53-03	PA-C6-53-02	PA-C8-51-03	PA-CR-WILOS	FAC6-W3-03	PA-C5-W3-02	_	PA-C6-E3-04	PA-C6-E3-01	PA-CK-E3-03	NJDEP	NOEP	NUDEP Impact to	_	I Hent Sample ID:

NJOEP - New Jersey Department of Environmental Prosection

mp/Kg - Milgrams per Kilograms, equivationt to parts per mil U - Not detected at the POL

U - Not detected at the POL.
J - Analysis detected below POL and/or estimated concentration
Grander with presented the concentration returns.

Table 7 Summary of Total Petroleum Hydrocarbons Soil Sampling Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Ment Sample IO:		NUDEP Impact to			MW-C5-N1-01	MW-C5-N1-02	MW-C5-N1-03	MA COMPLET	MW-C5-51-01	MW-C5-S1-02	MW-C4-51-03	MW-C4-51-04	NW-CS-E1-01	MW-C5-E1-02	MW-C5-E1-03	MW-CS-E1-04
Sampling Douth (fl)	_	Groundwater	Residential	Non-Residential	2.0-2.5	2.6-3.0	3.0-2.5	3.54.0	2.0-2.5	2,5.3.0	3.0-3.5	3,54.0	20.2.5	2.5-3.0	30-18	079.
feritach Sample ID:		Solf Cleanup	Direct Contact Soil	Direct Contact Soil Ulrect Contact Soil	_	10	AB47876	AB47877	AB47878	AB47£73	AB47880	AB47881	AB47882	AB47883	A847.884	APL7886
Sampling Date:	S S S	Criteria	Cleanup Criteria	Cleanup Criteria	12/5/2001		12/5/2001	12/\$/2007	12/2/201	12/5/2001	12/5/2001	12/5/2001	12/\$/2001	12/5/2001	12/\$/2001	12,5/2001
Juita	Nomber	mq/kg	mo/kg	mq/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	m9/kg	mg/kg	mg/kg	mg/kg	mg/kg	толи	a/ou
gal Petroleum Hydrocarbons 23135-22-0	23135-22-0	10000	10000	10000	98 00		n se	J 38	7500	1200	38	38	0000	000	35	25
. Jient Sample ID:		NJDEP Impact to	NUDEP	HJDEP	NW-C5-W1-01	MW-C6-W1-02	MW-C5-W1-03	MAN-CS-W1-04	PA-C6-51-01	PA-C&-51-02	PA-CE-51-03	PA-C6-S1-04	PA-C8-W1-01	PA-CS-W1-01	DA-CK-MH-01	DA CC.W44 04
Sempling Depth (fl)	_	Groundwater	Residentla	Non-Residential	2.0-2.5	2.5-3.0	3.0-3.5	3,54.0	2.0-2.5	2,52.0	3.0-3.6	3.54.0	2.0-2.5	2.5.3.0	3.0.1	
/entech Sample ID:	_	Soft Cleanup	Direct Confact Soll Direct Confact Soll	Direct Contact Soil	AB47886	AB47887	AB47888	AB47389	AB47671	AB47672	AB47673	AB47674	AB47675	AB47676	APHTRYY	8292FHT
Sampling Date:	CAS	Criteria	Cleanup Cribera	Cleanup Criteria	12/\$/2001	12/5/2001	12/6/2001	1002/3/21	1232201	12/2/2001	1202420	1277D01	12/ZD01	12/2/2001	12/2/2001	12/2/2001
Julta	Number	marka	ma/kg	mg/kg	mg/kg	Буубш	mg/kg	maña	mg/kg	mg/kg	mg/kg	e Age	mg/kg	ey/kg	mg/kg	ma/ka
fotal Petroleum Hydrocarbons	s 23135/22-0	10000	10000	10000	4700	130	35 U	D 250	29000	- 00002	THE RESIDENCE AND ADDRESS OF THE PARTY.	2100	- V18000	17000	4000	0008
Shent Sample ID:		NJOEP Impact to	NUDEP	NJOEP	PA-C6-E1-01	Ş	PA-C6-E1-03	PA-C5-E1-04	PA-C6-N1-01	PA-C6-M1-02	PA-C6-N1-03	PA-C6-W1-04	PA-C6-\$2-01	PA-C6-52-02	PA-C8-52-03	PA-C8-52-04
sampling Depth (ft)			Residential	Non-Residential	2.0-2.5	2.5-3.0	2.0-3.8	3.54.0	2.0-2.5	2.5.3.0	3.0-3.5	3.54.0	2.0-2.5	263.0	3.0-1.5	3.5.4.0
/ertroch Sample ID:	_	ē		Direct Contact Soil	AB47679		AB47661	AB47182	AB47683	AB-7884	AB47688	AB47186	AB47890	AB47891	A647892	AB-CRB3
Sampling Date:	3	Catteris	Ě	Cleanup Cottents	12/2/2001	_	(2/3/2001	12/3/2001	1222001	12/2/2001		12/2/201	1082001	12/4/2001		12/8/2001
Julis	Number	mgAg	mp/kg	maka	mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	Ш	mg/tg	mg/kg	mg/kg	mg/kg	mg/kg
otal Petroleum Hydrocarbons 23135-22-0	s 23135-22-0	10000	10000	10000	*Joe 10000	13800 Table	**************************************	1. C	76 33600 H	12000 - x c . x	- 8	8400	1,600	17000	534	* V = 0000 % % A
															į	
Hent Sample ID:		NJDEP Impact to		NJDEP	PA-C6-E2-01	20	PA-C6-E2-03	PA-C6-E3-04	PA-C5-W2-01	PA-CB-W2-02	PA-08-WZ-03	PA-CB-W2-04	PA-C6-N2-01	PACSESADS	PA-C6-E3A-02	PA-C6-E3-01
, Jampling Depth (ft)		Groundwater	Residential	Hon-Residential	2.0-2.6		3.0-3.8	3.540	20.25	2.8-3.0	3.0-3.6	3,40	2.0-2.6	8.0-8.5	8.0-8.5	2.0-2.5
/eritech Sample ID.		Soil Cleanup	Direct Confact Soil Direct Contact Soil	Direct Contect Soli	AB47894		AB47896	AB47887	AB47838	AB47899	AB47900	AB47301	AB47902	AB48317	AB48318	AB44116
Ampling Date:	3	Critaria	Cleanup Cnunia	Cleanup Criteria	125/2001		12/6/20d1		12/5/2001	12/6/2001	12/5/2001	12/5/2001	12/5/2001	12/11/2001	12/11/2001	12772001
Juice	Mumber	mg/kg	merta	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/lg	mg/kg	mg/kg	mg/kg	mg/kg
otal Patroleum Hydrocarbons 23135-22-0	23135-22-0	10000	1000	10000	19000c	. 19000		,	13000	4 - 2 5 - 0000 T 2 - 21	22000		15000	8500	360	- 18000at

Summary of Total Petroleum Hydrocarbons Soil Sampling Results
Naporano and Hugo Neu Facilities
Port Newark Newark, New Jersey Table 7

		M.DEP Lapacito	ACCEP	102	74.24	W-N2	16×10	DI. NO.	- T	7 10	Š
C C C C C C C C C C C C C C C C C C C		Groundwater	Residential	Non-Residential	0.5-1.5	4.5-5.0	0.5-2.0	6.0-8.0	0.5-1.6	6.4.0	1.5-2
The offech Sample (D:	_	Soil Cleanup	Direct Contact Soll	Direct Contact Soi?	AA34324	AA84328	AA84655	AA94658	AA34149	AA94150	AA30
mpling Dats:	CAS	Criteria	Cleanup Criteria	Cleanup Critische	B/Z7/1959	8/27/1999	927.1388	922/1299	8/25/1999	8/25/1989	76279
ilita:	Mumber	- ma/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	Ę
ial Petroleum Mydroca	rbons 23135-22-0	10000	10000	00001	9700	1300	28800	570	972	55	180
.nt											
ent Sample (D:		NJDEP Impact to	NJOEP	MOEP	MW-C4 3.1	WW-C4 S-3	MW-C5 S-1	MW-C5 5-3	PA-C6 5-1	PA-C6 5-5	O'Yd
Mapling Depth (f)		Groundwater	Residential	Non-Regidential	1.5-2.0	5-6-5	7	5.6.5	2	8-8.5	<u>ٺ</u>
Thech Sample ID:		Soli Cleanup	Direct Contact Soil	Direct Contact Soll	AA90437	AA90438	AA30531	AA90532	AA90533	AA90634	AASDS
mpilng Date:	cys C	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/4999	6/23/1999	8/24/1989	6/2421999	8/24/1999	6/24/1099	924
Ē	Number	mo/kg	mg/kg	ma/kg]	ma/kg	Da/kg	mg/kg	GA/BCI	EN/bm	TTQ/RG	ebu.
al Petroleum Hydroca	rbons 23135-22-0	1000	10000	10000	1200		00028	17	00,77	180	100 P
20											
ent Sample ID:		MJDEP Impact to	43gPA	NJOEP	BH-MBC	CSN-HS	G-C				
1 mpling Depth (3)		Groundwater	Residends!	Non-Residential	0.5-2.5	0.6-2.5					
d ritech Sample ID:		Soil Cleanup	Direct Contact Soil	Direct Gordact Stall	AB38337	ABJB338					
npiling Date.	CAS	Critiaria	Cleanup Critisha	Cleanup Critishia	7/23/2001	7/23/2001					
2	Number	marka	mg/tg	mg/kg	mg/kg	ma/kg					
N. Pelorierin Hydrocamons	21135 37 D	Ç.	20000	outer,	47,7an	Sa					

8H-H5B 0.5-2.5 AB36336 7/23/2001 mg/kg 430

8N-N6A 0.5-2.5 AB38336 7/23/2001 mg/kg 4300

BH+NT 0.0-0.5 AB15068 10/2/2000

BH-N6 0.0-0.4 AB16066 10/2/2000

PA-C7 \$-6 E-8.5 AA90536 8/24/1999

MW-C1 S-4 6-7 AA90328 6/22/1993 mg/kg

MW-C1 S-2 3-3.6 AM90434 6/23/1399

Table 8 Summary of Excel's Volatile Organic Compounds Soil Sampling Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-4A	SB-4A	SB-4B	SB-4B
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	1.0-1.5	5.5-6.0	.5-1.0	5.5-6.0
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	140185	140186	140187	140188
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/24/1999	6/24/1999	6/24/1999	6/24/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
chlorofluoromethane	NA	NA NA	NA	0.67	ND	1.8	ND
etrachloroethene	1	4	6	ND	ND	0.41	ND
Toluene	500	1000	1000	0.98 J	_ ND	0.31	ND
Ethylbenzene	100	1000	1000	ND	ND	0.15	ND
Xylene	67	410	1000	ND	ND	0.74	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup criteria

1 of 1

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Table 9 Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-1	SB-1	SB-2	SB-4A	SB-4A	SB-4B*	SB-4B
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	0.0-0.5	2.0-2.5	1.0-1.5	1.0-1.5	5.5-6.0	0.5-1.0	5.5-6.0
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	139896	139897	139892	140185	140186	140187	140188
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	6/23/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
hthalene	100	230	4200	0.080 J	ND	ND	0.210 J	NĎ	0.490 J	ND
enaphthylene	NA	, NA	NA	0.160 J	ND	ND	0.290 J	ND	0.5 4 0 J	ND
Acenaphthene	100	3400	10000	0.030 J	ND	ND	0.220 J	ND	0.580 J	ND
Fluorene	100	2300	10000	0.041 J	ND	ND	0.260 J	ND	0.610 J	ND
Phenanthrene	NA	NA NA	NA	0.810 J	ND	ND	1.60 J	0.014 J	4.9	0.0081 J
Anthracene	100	10000	10000	0.220 J	מא	ND	0.520 J	ND	1. 4 0 J	ND
Fluoranthene	100	2300	10000	1.7	0.012 J	ND	3.30 J	DN	10.0	0.0074 J
Pyrene	100	1700	10000	1.6	0.012 J	ND	4.0 J	ND	8.7	0.012 J
Benzo[a]anthracene	500	0.9	4	more.	0.017 J	ND	5	ND	4.7	ND
Chrysene	500	9	40	1.2	0.0096 J	ND	1.50 J	ND	5.3	ND
Benzo[b]Fluoranthene	50	0.9	4	34	0.012 J	ND	3.4	ND	5675	ND
Benzo[k]Fluoranthene	500	. 0.9	4	1312	ND	ND	1.1	ND	2,0	ND
Benzo(a)pyrene	100	0.66	0.66	17	0.011 J	ND	720.00	ND	970.0	ND
Indeno[1,2,3-cd]pyrene	500	0.9	4	0.350 J	0.0079 J	ND	0.85	ND	1.4	ND
Dibenzo[a,h]anthracene	100	0.66	0.66	ND	ND	ND	ND	ND	0.390	ND
nzo[g,h,l]perylene	NA	NA	NA NA	0.320 J	0.007 6 J	ND	0.650 J	ND	1.40 J	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Table 9 Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-5A	SB-5A	SB-5B	SB-5B	SB-5C	SB-5C	SB-5E
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	0.0-0.5	6.5-7.0	0.0-0.5	7.0-7.5	2.0-2.5	3.5-4.0	0.5-1.0
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	139898	139901	139907	109909	139905	139906	139902
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ohthalene	100	230	4200	1.0 J	ND	0.220 J	ND	5.3	0.240 J	0.610 J
enaphthylene	NA	NA	NA	1.60 J	ND	0.480 J	ND	0.240 J	0.070 J	0.360 J
Acenaphthene	100	3400	10000	0.170 J	ND	0.170 J	ND	1.20 J	0.360 J	1.5 J
Fluorene	100	2300	10000	0.370 J	ND	0.180 J	ND	0.920 J	0.52	1.8 J
Phenanthrene	NA	NA	NA	2.4	ND	1.70 J	ND	4.8	1.3	18.0
Anthracene	100	10000	10000	1.50 J	ND	0.710 J	ND	1.4 J	0.290 J	4.6
Fluoranthene	100	2300	10000	4.4	ND	4.70 J	ND	7.5	0.670 J	21.0
Pyrene	100	1700	10000	11.0	ND	4.50 J	ND	5.0	0.47	15.0
Benzo[a]anthracene	500	0.9	4	26	ND	2.1	ND	3.6	0.14	J Q£
Chrysene	500	9	40	2.7	ND	2.60 J	ND	2.6	0.120 J	8.3
Benzo[b]Fluoranthene	50	0.9	4	34.0	ND	0144.6 mg	ND	2.9	0.1	b Signer
Benzo[k]Fluoranthene	500	0.9	4	ND	ND	1.6	ND	1.2	0.036 J	4.0
Benzo[a]pyrene	100	0.66	0.66	4.4	ND	30	ND	117	0.059	
Indeno[1,2,3-cd]pyrene	500	0.9	4	1.1	ND	1.4	ND	0.5	0.028 J	1.4
Dibenzo[a,h]anthracene	100	0.66	0.66	0.3	ND	0.40 J	ND	0.150 J	0.012 J	0.58
nzo[g,h,l]perylene	NA	NA	NA	1.01	ND	1.20 J	ND	0.420 J	0.029 J	1.20 J

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Table 9

Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-5E	SB-5F	SB-5F
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	6.0-6.5	1.0-1.5	5.5-6.0
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	139904	140191	140193
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/25/1999	6/25/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
phthalene	100	230	4200	ND	0.960 J	ND
enaphthylene	NA NA	NA	NA	ND	0.280 J	ND
Acenaphthene	100	3400	10000	ND	2.70 J	ND
Fluorene	100	2300	10000	ND	2.70 J	ND
Phenanthrene	NA	NA	NA	ND	21.0	ND
Anthracene	100	10000	10000	ND	6.3	ND
Fluoranthene	100	2300	10000	ND	37.0	ND
Pyrene	100	1700	10000	ND	32.0	ND
Benzo[a]anthracene	500	0.9	4	ND	1504	ND
Chrysene	500	9	40	ND	17.0	ND
Benzo[b]Fluoranthene	50	0.9	4	ND	17.6	ND
Benzo[k]Fluoranthene	500	0.9	4	ND	601	ND
Benzo[a]pyrene	100	0.66	0.66	ND	120 (1	ND
Indeno[1,2,3-cd]pyrene	500	0.9	4	0.0084 J	424	ND
Dibenzo[a,h]anthracene	100	0.66	0.66	ND	asterlation.	ND
enzo[g,h,l]perylene	NA	NA	NA	0.0098 J	3.8	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Table 10 Summary of Excel's PCB Soil Sampling Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-4A	SB-4A	SB-4B	SB-4B	SB-5A	SB-5A
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	1.0-1.5	5.5-6.0	0.5-1.0	5.5-6.0	0.0-0.5	2.5-3.0
Lab Sample (D:	Soll Cleanup	Direct Contact Soil	Direct Contact Soil	140185	140186	140187	140188	139898	139899
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/23/1999	6/23/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
oclor 1242	50	0.49	2	a 8.5 g	ND	- 27	ND	ND	ND
oclor 1248	50	0.49	2	ND	ND	ND	ND	1.0	ND
Aroclor 1254	50	0.49	2	4 of 4 90 move.	ND		ND	5.8	ND
Aroclor 1260	50	0.49	2	25)	ND		ND	ND	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyle detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Table 10 Summary of Excel's PCB Soil Sampling Results Naporano and Hugo Neu Facilities **Port Newark** Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-5B	SB-5B	SB-5B	SB-5C	SB-5C	SB-5D	SB-5D
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	0.0-0.5	2.5-3.0	7.0-7.5	2.0-2.5	3.5-4.0	0.0-0.5	1.5-2.0
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	139907	139908	139909	139905	139906	140189	140190
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/25/1999	6/25/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
oclor 1242	50	0.49	2	ND	× July	ND	ND	ND		ND
oclor 1248	50	0.49		2455	ND	ND	ar Walte	ND	ND	0.4
Aroclor 1254	50	0.49	2			ND	h i go a da	ND		0.34
Aroclor 1260	50	0.49	2	ND _	4.55	ND	ND	ND		0.19

Notes:

NJDEP - New Jersey Department of Environmental Protection

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U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Table 10 Summary of Excel's PCB Soil Sampling Results Naporano and Hugo Neu Facilities **Port Newark** Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-5D	SB-5E	SB-5E	SB-5E	SB-5F	SB-5F
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	3.5-4.0	0.5-1.0	2.5-3.0	6.0-6.5	1.0-1.5	2.5-3.0
Lab Sample ID:	Soll Cleanup	Direct Contact Soil	Direct Contact Soil	140196	139902	139903	139904	140191	140192
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/25/1999	6/23/1999	6/23/1999	6/23/1999	6/25/1999	6/25/1999
Uni <u>t</u> s:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
clor 1242	50	0.49	2	Ó.56	ND	1501	ND	FX.15.	ND
Clor 1248	50	0.49	2		+12	ND	ND	ND	ND
Aroclor 1254	50	0.49	2	0.44		0 (0) (2) (4) (4)	0.15		ND
Aroclor 1260	50	0.49	2	0.26	ND	Mark III		新心运停	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Table 11 Summary of Excel's Inorganic Soll Sampling Results Naporano and Hugo Neu Port Newark Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-4A	SB-4A	\$B-4B	SB-4B	SB-5A	SB-5A	SB-5A	SB-5B	\$B-5B
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	1.0-1.5	5.5-6.0	0.5-1.0	5.5-6.0	0.0-0.5	2.5-3.0	6.5-7.0	0.0-0.5	7.0-7.5
Lab Sample IO:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	140185	140185	140187	140188	139898	139899	139901	139907	139909
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	NA	14	340	NA_	NA	NA	NA	1189	ND	ND	9.0 B	NA
Arsenic	NA NA	20	20	NA.	NA	NA	NA	7 5	NA NA	NA	8.4	NA
ryllium	NA	2	2	NA	NA	NA	NA	0.23 B	NA	NA	0.28 B	NA
admium	NA _	39	100	NA	NA	NA	NA	6.2	NA	NA	28.4	NA
Chromium	NA	500	500	NA _	NA	NA	NA	135	NA	NA	321	NA
Copper	NA NA	600	600	NA	NA	NA		in here	6.9	5.3	a despair de la company	0.93 B
Lead	NA NA	400	600	189	ND	2 540	ND	क्षा क्षेत्रक्षेत्र । स्टब्स्	4.8	4.2		1.2
Mercury	NA	14	270	NA	NA	_ NA	NA	1.3	NA	NA	6.3	NA
Nickel	NA NA	250	2400	NA	NA	NA	NA	96.6	NA	NA	324	2.8 B
Selenium	NA NA	63	3100	NA	NA	NA	NA_	3.7	NA	NA	ND	NA NA
Thallium	NA	2	2	NA	NA	NA	NA	ND	NA	NA	ND	NA
Silver	NA	110	4100	NA	NA	NA	NA	36.1	NA	NA	1.5 B	NA
Zinc	NA	1500	1500	NA	NA	NA	NA NA	1,440	NA	NA		5.3 B

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup critena

Excel Data Tables

Table 11 Summary of Excel's Inorganic Soil Sampling Results Naporano and Hugo Neu **Port Newark** Newark, New Jersey

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-5C	SB-5C	SB-5D	SB-5D	SB-5E	SB-5E	SB-5F	SB-5F	SB-5F
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	2.0-2.5	3.5-4.0	0.0-0.5	3.5-4.0	0.5-1.0	6.0-5.6	1.0-1.5	2.5-3.0	5.5-6.0
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	139905	139906	140189	140196	139902	139904	140191	140192	140193
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	6/25/1999	6/25/1999	6/23/1999	6/23/1999	6/25/1999	6/25/1999	6/25/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	NA	14	340	<u> 5</u> , 524:1	ND	ND	NA	ND	NA	ND	NA	NA
Arsenic	NA	20	20	16.4	NA	11.9	NA	13,1	NA	16.1	NA	NA
Vlium	NA	2	2	ND	NA	ND	NA	D 2	NA	0 19 B	NA	NA
dmium	NA	39	100	11 4	NA	15.6	NA	19.2	NA.	62	NA	NA
Chromium	NA	500	500	1,270 🕏	NA	841	NA	.4 08,200	NA	182	NA	NA
Copper	NA .	600		** 3,770 °	2.5 B	579	NA	F1.500	6 1	50,800	7.1	4.2 B
Lead	NA	400	600	1710	3,4	882	38.1	960	6.0	4.00	7 1	3.2
Mercury	NA '	14	270	4.1	NA	38	NA	0.27	NA	5.0	NA	NA
Nickel	_ NA	250	2400	571	61 <u>B</u>	577	18.3	20.800	21.9	176	NA ·	NA NA
Selenium	NA NA	63_	3100	ND	NA	ND	NA	ND	NA	ND	NA .	NA
Thallium	NA	2	2	ND	NA	ND	NA	ND	NA	ND	NA	NA
Silver	NA	110	4100	3.7 B	NA	ND	NA	2.9 B	N <u>A</u>	2.5 B	NA	NA
Zinc	NA NA	1500	1500	2,720	55.1	22.0	99.3	20 42 0 m	19.6	2 (80)	25.4	13.3

Notes:

NJDEP - New Jersey Department of Environmental Protection mg/Kg - Miligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Table 12 Summary of Excel's Total Petroleum Hydrocarbons Soll Sampling Results Naporano and Hugo Neu Facilittes Port Newark Newark, New Jersey

nt Sample ID:	NJDEP Impact to	NJOEP	NJDEP	SB-1	SB-1	\$B-3	SB-3	8B-4A	SB-4A	88 4B	SB-4B	\$B.5A	SB-5A
(1) the Depth (R)	Groundwater	Residential	Non-Residentia)	6.0-0.9	2.0-2.5	1,0-1.5	1.0-1.5	1,0.1.5	5.5-6.0	0.5-1.0	5.5-6.0	0.0-0.8	2.5-3.0
J. Sample ID:	Soil Cleanup	Direct Contact Soli	Direct Contact Soil	139896	139897	139892	139684	140185	140186	140187	140188	139898	139899
🛑 upling Data:	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6724/1999	6/24/1999	6/24/1989	6/24/1999	6/23/1999	6/23/196
ë	mg/kg	mg/kg	mg/kg	⊕g/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Petroleum Hydrocarbons	10000	10000	10000	** 16000 ×	25.5	144	94.6	1200	33.9	\$ 13700 =	28.2	, (eeco	₽
ner												i	
t Sample (D:	NJDEP Impact to	NOEP	NUDEP	SB-SE	SB-5E	SB-SE	PP 25	SB-6F	SB-4F	FB-1	FB-2		
- soling Depth (ft)	Groundwater	Residential	Non-Residential	0.5-1.0	2.5-3.0	6.0-6.5	1.0-1.5	25-3.0	5.5-6.0	ı	ı		
Sample ID:	Soil Cleanup	Oirect Contact Soil	Direct Contact Soil	138902	139903	139904	140191	140192	140193	139910	140194		
O ipling Date:	Critteria	Cleanup Celtaria	Cleanup Criteria	6/23/1999	6/23/1899	5/23/1999	6/25/1899	6/25/1999	6/25/1999	6/23/1989	6/24/1999		
ñ	mg/kg	mg/kg	marka	то/ка	mg/kg	mg/kg	E4/60	mg/kg	mg/kg	mg/kg	mg/kg		
# Petroleum Hydrocarbons	00001	00001	10000	13000	1900	130	0.296	¥	ΑN	ďΝ	ş		

58-5D 0.0-0.5 140189 6/25/1999 mg/kg 5200

58-58 2.5-3.0 1399-08 6/23/1999 mg/kg 6290

\$8-50 2.0-2.5 139905 6/23/1999

Table 13 Summary of Volatile Organic Compounds Groundwater Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Client Sample ID:		Class IIa	MW-N2	MW-C2	MW-C3	MW-C4	MW-C5	F-BLANK	T-BLANK	F-BLANK	T-BLANK	FB-1-092199	TD 4 000400
Veritech Sample ID:		Ground Water	AA95332	AA91353	AA91297	AA91354	AA91355	AA91298	AA91299	AA91356			TB-1-092199
Sampling Date:	CAS	Quality Standards	9/21/1999	7/13/1999	7/12/1999	7/13/1999	7/13/1999	7/12/1999	7/12/1999	7/13/1999	AA91367	AA91336	AA95337
Daits:	Number	UG/L	UG/L	UG/L	UG/L	7/13/1989 UG/L	1111 (444	1/12/1999 UG/L	1/12/1999 UG/L	//13/1999 UG/L	7/13/1999	9/21/1999 UG/L	9/21/1999
	71-55-6	30	0.51 U	0.38 U	0 38 U		0.38 U	0.38 U	0.38 U		UG/L		UG/L
1,1-Trichloroethane	79-34-5		0.51 D	0.38 U	0.23 U	0.38 U	0.38 U		0.36 U	0.38 U	0.38 U	0.51 U	0.51 U
1.1,2,2-Tetrachloroethane		2			0.23 U	0.23 U		0 23 U		0.23 U	0.23 U	0.55 ป	0.55 U
1.1.2-Trichloroethane	79-00-5 75-34-3	3 50	0,58 U	0.29 U	0 29 U	029 U	0 29 U	0.29 U 0.29 U	0,29 U 0 29 U	0.29 U	0.29 U	0 58 U	0 58 U
1,1-Dichlorgethane	75-34-3		0.52 U			0.29 U		11 U	_	0.29 U	0 29 U	0.52 U	0.52 U
1,1-Dichloroethene	75-35-4 95-50-1	2	0.68 U	110	11 U 0.3 U	1.1 U 0.3 U	1.1 U 0.3 U	0.3 U	1.1 U 0.3 U	11 U 0.3 U	110	0.5a U	0.68 U
1,2-Oichlorobenzene	107-36-2	600	0 25 U	0.3 U 0.31 U	0.31 U	0.3 U	0.31 U	0.31 U	0.31 U	0.3 U	0.3 U	0.25 U	0.25 ∪
1,2-Dichloroethane	78-87-5	2	0.43 U	0.31 U	0.31 U		0.31 U	0.33 U	0.31 U	0.31 U	0.31 U	0 43 U	8 43 U
1,2-Dichloropropane		1 222				0.33 U					0.33 U	0.39 ⊔	0.39 U
1.3-Dichlorobenzens	541-73-1	600 75	0 76 U	0.21 U 0.28 U	0 21 U	0.21 U	0 21 U	0.21 U 0.28 U	0 21 U	0 21 U	0.21 U	0 76 U	0 76 U
1,4-Dichlorobenzene	106-46-7 78-93-3	360	0.4 U		2 U	0,28 U	2 U		0 26 U	0.28 U	0.28 U	0.4 U	0.4 U
2-Butanone			14 U	2 U			4 7 U	2 U 4 7 U		2 U	20	140	14U
2-Chloroethylvinylether	110-75-8	NA NA	10	47U	4 7 U	470	0.56 U	0.56 U	9.56 U	4 7 U	47Ū	10	1 U
2-Hexanone	591-78-6 108-10-1	NA 400	0.76 U 0.78 U	0.56 U 0.29 U	0.56 U	0.56 U 0.29 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0 76 L	0 78 U
4-Methyl-2-Pentanone	108-10-1 67-64-1	700			2 1 U	21 U	2 1 U	210	2.1 U	21 U	0.29 U	0.78 U	0 78 ك
Acetone	107-02-8	NA NA	4.8 U	21 U	67 U	67 U	67 U	67 U	67 U	5.7 U	2.1 U	4.8 U	4.8 U
Acralein	107-02-8		9.4 U 6.9 U	180	18 U	1.8 U	1870	18 U	18 U	1,8 U	67U	9.4 🗓	9.4 U
Acrytanitrile	71-43-2	30	0.47 U	0 19 U	0,19 U	1.0 1.1	0 19 U	0 19 U	0,19 U	0 19 U	1.8 U	6.9 U	6.9 U
Benzene	75-27-4		0.47 U	0.31 U	0,19 U	D31 U	0.31 U	0.31 U	0.19 U	0.31 U	0.19 U	0.47 U	0.47 U
Bromodichloromethane Bromoform	75-25-2	-		0.31 U	0.31 U	0,31 U	0.3) U	0.31 U	0,31 U	0.31 U	0.35 U	0.85 U	0.85 U
Bromorom Bromomethane	74-83-9	10	13U	0 42 U	0.35 U	0.42 U	0.42 U	0.42 U	0.42 U	0.35 U		130	13 U
Carbon Disulfide	75-15-0		0.4 U	0.31 U	0.31 U	0.42 U	0.42 U	0.42 U	0.42 U	0.31 U	0.42 U 0.31 U	1.2 U	120
Carbon Districte	56-23-5	2	0.81 U	0.42 U	0.3 U	0.42 U	0 42 U	0.31 U	0.31 U	0.42 U	0.42 U	0.81 U	0.4 U
Chlorobenzene	108-90-7	- 4	0.64 U	0.42 0	0.25 U	0.42 U	0 25 U	0.25 U	0.25 Ú	0.25 U	0.42 U	0.61 U	0.81 U
	75-00-3	NA NA	2.5 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.23 L	0.49 U	2.5 U	0.64 U 2.5 U
Chloroethane Chloroform	67-66-3	NA	0.47 U	0,49 U	0.25 U	0.49 U	0.49 U	0.25 U	0.49 U	0.25 U	0.49 U	0.47 U	0 47 U
Chloromethane	74-87-3	30	0.65 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.65 U	0.65 U
cis-1.2-Dichloroethene	156-59-2	10	0.81 U	0 38 U	0.23 U	0.38 U	0.38 U	0.38 U	0.23 U	0.38 U	0.38 U	0.83 U	0.81 U
cis-1,3-Dichloropropene	10061-01-5		0.45 U	0.36 U	0 36 U	0.36 U	0.36 U	0.36 U	0.36 1	0.36 U	0.36 U	0.45 U	0.45 U
di-Isopropyl-ether	108-20-3	NA NA	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.33 U	0.23 U	0.23 U	0.23 U	0.33 U	0.45 U
Dibromochloromethane	124-48-1	— 10	0.7 U	0.33 U	0.33 U	0 33 U	0.33 U	0.23 U	0.33 U	0.23 U	0.33 U	0.7 U	0.33 U
Dichlorodifluoromethane	75-71-8	NA NA	0.57 U	0.33 U	0.33 U	0 33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.67 U	0.67 Ú
Ethylbenzene	100-41-4	700	0.57 U	0.33 U	0.33 U	0 15 U	0.35 U	0.33 U	0.33 U	0.15 U	0.15 U	0.97 1	0.67 U
Methyl-t-butyl ether	1634-04-4	NA NA	3.4	0 42 U	4.3	0.42 U	9.4	0.42 U	0.42 U	0.42 U	0.13 U	0.43 U	0.43 U
Methylene Chloride	75-09-2	2	150	0.82 U	0.82	0 82 U	0.82 U	0.82 U	0.82 U	0,82 U	0.82 U	150	150
Styrene	100-42-5	100	0.33 U	D.24 U	0.24 U	0.24	0.24 U	0 24 U	0.24 U	0.24 U	0.24 U	0 33 U	0.33 U
I-Butvi Alcohol	75-65-0	NA NA	57U	930	9.3 U	9.3 U	9.3 U	9.3 1	9.3 U	9.3 U	9.3 U	5.7 U	5 7 U
Tetrachlorgethene	127-18-4	1	- - 1 0	0.47 U	0.47 U	14	0.47 U	0.47 U	0.47 U	0 47 13	0 47 U	10	10
Toluene	108-88-3	1000	0.45 U	0.23 U	0.23 U	1.2	D 23 U	0.23 U	9,23 U	0.23 Ŭ	0.23 U	0 45 U	0.45 U
trans-1.2-Dichloroethene	156-60-5	100	120	0.23 U	0.23 U	0.79 U	0 79 U	0.79 U	0.79 U	0.23 U	0.79 U	1,2 U	1,2 U
trans-1.3-Dichloropropene	10051-02-5	NA NA	0.42 U	0 21 U	0,21 U	9.21 U	0.21 U	0 21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.42 U
Trichioroethene	79-01-6		0.42 U	0.28 U	0.28 U	0.28 U	0.21 U	0.28 U	0.21 U	0.21 U	D.28 U	0.42 U	0.42 U
Trichlarofluoromethane	75-69-4	NA NA	0.81 U	0.4 U	04 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.73 U	0.81 U
Vinyl Acetate	108-05-4	NA NA	D 32 U	0.23 U	0.23 U	0,23 U	0.23 U	0,23 U	0.23 U	0.23 U	0.3 ti	0.32 ਪ	0.81 U
Vinyl Chloride	75.01-4	 _	1.1 U	0,23 U	0.23 U	0.52 U	0.23 U	0.52 U	0.52 U	0.52 U	0.52 U	1.1 U I	110
M&P-Xylenes	1330-20-7	NA H	110	0.57 U	0.57 U	0.57 U	0.57 LJ	0.57 U	0.52 U	0.52 U	0.52 U	110	
O-Xylene	95-47-6	NA NA	0.69 U	0.57 U	0.57 U	C 15 U	0.15 U	0.57 U	0.57 U	0.15 U	0 15 U	0.69 U	0.69 U
U-VAIGHE	93-41-G		U.09 U.	0100	<u> </u>	1,10	0,133	0,50	0 13 0 1	0.13 0	0.100	0.03 0	0.09 ()

NOTES

- ug / L Micrograms per Liter, equivalent to parts per billion
- U Not detected at the MDL
- J Analyte detected below MDL and/or estimated concentration

Shaded Values Exceeded Corresponding Cleanup Criteria

NA Not Available

Page 1 of 1 GW Data 9-18-02.xis

Table 14
Summary of Semivolatile Organic Compounds Groundwater Results
Naporano and Hugo Neu
Port Nawark
Newark, New Jersey

Marchest Marchest	Veritech Sample ID:		Ground Water		AAS(353		1	777.25	200	2000	
1985 1985	ampling Date: Infls:	Number Fumber	Quality Standards UGAL	à	7/13/1999 UGL	7712M399	7/13/1899 GG/L	7/12/1899 UGA	7772/1989 UGAL	7/13/1999 UGA	\$721/1999 UGA
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	.2,4-ThChlorobenzene	120-82-1		ķ,	043 U	043 0	0.43 U	0430	043 U	0.43	
Color Colo	2-Dichlarobenzene	85-50-1	909	7 7 0	0.46	2 150	2	2 10	70	3	- - - - - - - -
10	J-Dichgrobenzene	17.17	009	2 89 12	0 2 1	2 4 5	0.27	0.7	0.21	7 2 0	
1995, 3 3 3 3 3 3 3 3 3	4.5-Trchlorophenol	95-85-4	700	0 15	0 12	210	210	210	210	210	2 2
1898 23 120	4.8.TreMorephenel	\$8-06-2	3	<u>11 S1</u>	13.0	150	150	1.5 U	1.5 U	1.5 U	2
17,255.2 10,000	4-Dichlorophenol	120-83-2	20	23 0	23 0	23 0	200	2.3 C	230	73 C	
12,12,12, 1,0	4-Dinfrophenol	51-28-5	40	7	?		15	7	0.7		3
1875 1970	4-Dintrotokuene	121-14-2	10	O 89 O	() #3 O	0 %	⊃ 800	0.89	0.69	0.69	0.68
1982 1982	8-Diminotoluere	506-20-2	10	0 22 0	0.72 U	0 72 U	0.72 U	D 72 U	6.72 U	0.72.0	0.72
### 1992	Chorbaphthalene	91.58.7	₹.	0 10 0	0 11 0			130	3.5 (1	33.0	
1985-15 1985	Methylagino	25.5	97	27.0		7	, _		7 7 7	440	
100 100	Methylphenol	95-48-7	2	330	33.0	330	33.0	330	330	330	333
100-14-15 100-	Nimentine	88-74-4	¥	2.5 U	2.8 U	260	28 U	2.5 U	2.6 ∪	2.8.0	28.0
10 10 10 10 10 10 10 10	Nitrophenoi	98-75-5	¥	24.0	210	24 €	23 ∪	2.4 U	250	2.4 C	
100 100	34-Methyphenol	106-44-5	Ϋ́		310			7	3 0		
12,22,22,23,34 12,22 12,22 12,22 12,22 13,	Campandon	31.94-7	20 5	28.7	25.0	200	2000	250	35.	25.0	7 4 6
10 10 10 10 10 10 10 10	A.Dinem-2-methylphonol	23.00	5	24.0	2 7 7	240	24.0	24.0	240	74.0	2 2
1847.2 18 11 11 12 12 13 13 13 13	- Stornophenyl-phenylether	101-55-3	¥.	0.54 U	⊃ X 0	0.54	0.66.0	0.54	0.54 U	0.54 U	0.54
100,0014	-Chloro-3-methy/phanol	59-50-7	¥	1.8 U	_ 10) •	7	181	180] 0 - -	
100,000 100,	Chloroaniline	106-47-9	≨;	220	0.52	22,0	277	227	220	2220	22
1982 1982	Charge and property control of the c	7005-72-3	\$ 3	7910	1000			2 9 0	0.62	2000	
12-12-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2	Hirochens	100-02	\$ 2	270	27.0	270	7/2	27 [27.0	340	7
100-15-15-15-15-15-15-15-15-15-15-15-15-15-	Cenaphthene	63-35-9	400		0.39 U	D 35 U	1	0 39 U	0.39 U	D 08 C	0.39 U
128.12.4 2000 201	canaphthylene	308-86-8	ž	0 23 U	250	0.29 U	⊃ R,	230	280	2 20	20
1985 1985	infinacene	120-12-/	2000	0.23 U	0.23 (2	7	0.23 0	S S	200	232
10,000 1,0	Second anthogosts	27.87.5	8 2	0.25 U	2020	10.80	0.25	0.25 U	0.80	0.25	
1,000,000 0,000	e-zo(epyrane	50.32.8	€ ₹	D 86 0	D 95 0	0.36 U	7 96 0	0.36 13	0.35 U	1 SE 0	98 0
100.056-2 NA	Ser Zo(b)Fluoranthene	205-99-2	Z	0.51 0	0.51 U	0.51 U	0.55 []	0.550	0.51.0	0.51 U	0.51 U
Section Sect	lenzo(g.h.]perylene	191.24.2	ź	0.27 U	0.220	0.27 U	0.57 U	0.27	0.27 U	527 5	U 22 U
10 10 10 10 10 10 10 10	Serzo(XIF luckanihene	207-03-9	≨:	0.59 U	0.58 U	0.58	0.55	200	0.58 0	35 S	0.59
111441	Second Acobo	95.63.00	2002	38.5	380	380	38.6	3.80	3,80	3.8 0	
11444 March Marc	is(2-Chonelhoxy)Methane	111.81	Ź	040	0.4.3	0.0	0.00	040	0.40	040	0.4
1,000,000 1,000	is(2-Chloroetnyljether	111-44-4	16	0.56 U	0.56 U	0.56 U	0.56 U	0.56 ∪	0.56 U	0.56 U	989
17.651.7 12.65 1	ie/2.Chlororepropyjether	108-60-1	\$63	1.6 (100	18.	100	160	160	16 0	9.0
1975 1975	AS(2-Ethylvaxy)phonaige	117.81.7	S S	2 1	2,690	11 67 0	6.69	0 640	0.491	777	0 09
1,1,1,2,2 1,1,2,3 1,1,3,4,4,4,5 1,1,3,4,4,4,5 1,1,3,4,4,4,5 1,1,3,4,4,4,5 1,1,3,4,4,4,5 1,1,3,4,4,4,5 1,1,3,4,4,4,5 1,1,3,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,	San Darzolle	66-74-8	and the	0.09	0.620	2000		0.29	0.870	200	200
1,2,4,2 10,0	hyseria	215-01-9	ž	0 27 0	0.27 0	0.27 0	0.27 U	0.27 U	0.220	0.27 U	0.27 U
1,1,2,4,4,5 1,0,4 1,0,5	h-p-buty/phihelate	94.74-2	306	078 U	0.78 %	25.00	0.78	0.08	0 2/8 0	0 28 0	2 28
13,24.5 3,00	N-CONTONINGUE	157-84-0	901	0.55	0530	200	200	0 20	0.63	0.63	
10 10 10 10 10 10 10 10	hbenjotum	20756	Ž	250	25 6	25 0	15	250	250	2.5 U	25.0
19 19 19 19 19 19 19 19	liethytyfilhalate	84-56-2	9009	17.0	1,7 U	10/1	5	19.7	17.0	170	1
1957-1 300 0.55 U 0.55	Smethylphthalaha	131-153	×Ν	0.23 U	0.23 U	0.23 U	023 0	0.23 ∪	0.23 0	0.23 (27 27 27 27 27 27
135.24 10 10 10 10 10 10 10 1	todianiment	200440	200	1 2 2 2	1 26 0	3 2	0 0	0 229	0.28	1820	
17.24 10 11.0 1	lexachloropenzene	11874.1		100	0.41	100	041	0410	7 1 0		
11 11 11 11 11 11 11 1	lexachioroby/adjene	B7-58-3		3910	0.91 U	0.91 U	U 180	0.81	0.61 U	0.84 U	0 160
1923/9-2 NA	hxachlorocyclopenladiene	17-17-4	90	11 (1	10) - -		2 :) -		 -
19.556-3	lexachlorowhane	67.72.1	0	110	11 00) - - - - -	3			0 1 2)
13 13 13 13 13 13 13 13	toeno i c culpyrate	19139.5	₹ Ş	0.670	0 450	10.675	2 64	0471	1 40	17 27 0	2 12
13 13 13 13 13 13 13 13	Lineage Dr.N. Propylamine	821-84.7	202	0.94 U	394 U	10 18	10.3	0.94 C	0.40	7 760	1200
10 10 10 10 10 10 10 10	-Netrosodimethylamine	62-75-9	20	130	1.3 U	13.0	0.61	13 U	1.3 U	13 U] []
91-30-3 300 c.44 0 944 0 924 0	-Nitrosodiphenylamine	86.30 6	Q.	C-84-D	364	D 480	0.64 U	0.64 U	1 790	0.830	0.44
850-4 NA 035U 637U 637U 637U 637U 637U 637U 637U 637	laphthalene	91-20-3	300	0.44 U	0 2 2	3 5	4 6	16	100	200	2 (5 2 (5 2 (5 2 (5)
85074 NA 038 U 12 43 15 038 U 13 13 13 13 13 13 13 13 13 13 13 13 13	Alreadon Land	200		11 63	10 13		11.63	10.28	17.78	27.0	
13 U 13 U 13 U 13 U 13 U 13 U 13 U 13 U	henanthrene	85-01-6	¥	0.35 []	0.35 U	2.2	e 	37	0.36.0	0.35 %	0.35 U
200 038 0 1 038 0 0 38 0	hend	108-35-2	4000	13.0	1.3 0	0	130	1.3	13 0		130
	yrane	128 69-0	200	200	-						

Table 15 Summary of Pesticides and PCB Groundwater Sampling Results Naporano and Hugo Neu Facilities Newark, New Jersey Port Newark

⊫	_	=		=	-	=	==	_	_	~	=	_	_	_		_	_	_		_	_	_	-		_	_	_	_		-
FB-1-092199	AA95336	9/21/1999	NOV.) (0.10	0.1 ∪	0.2 0	0.1 U	0.10	010	0.1	0.10	0.10	0.10	U 1.0	010	0.1 U	0.10	0.1 U	0.10	0.1 U	010	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	05 U
FBLANK	AA91356	7/13/1939	UGAL.	0.10	0.1.0	0.1 U	0.20	0.1 ∪	NA	010	0.1 U	0.1 U	010	0.1 ()	0.1.0	0.1 U	0.1 U	0.10	0.1 0	0.1 U	0.1 U	0.1 U	10	0.5 0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
F-BLANK	AA91298	7/12/1999	UGL	D 1:0	010	0.1 0	0.2 0	0.10	Ą	010	0.1 U	010	0.1 0	0.1 U	010	0.1 Ū	0.1 U	0.1 U	0.1 Ū	010	0.1 Ū	010	10	0.5 U	0.5 U	0.5 U	0.5 ∪	0.5 0	0.5 U	0.5 U
MW-C5	AA91355	7/13/1999	UG/L	0.10	0.10	010	0.2 U	0.1 0	ΨN	0.10	0.1 U	0.1 U	0.10	0.1 Ū	010	010	010	0.1.0	0.1 Ū	010	0.1 U	010) l	0.5 U	0.5 U	0.5 0	0.5 U	0.5.0	0.5 U	0.5 U
MW-C4	AAB1354	7/13/1999	UG/L	0.10	0.10	0.1 U	0.20	0.1 U	ž	010	0.1.0	0.1.0	0.1 U	0.1.0	010	0.1 U	0.10	010	0.1 U	0.10	0.10	0.10	101	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50
MW-C3	AA91297	7/12/1999	UGAL	010	0.1 U	0 1 (1	0.2.0	0.1 U	ΨN	0.10	010	010	0.1 U	2 1.0	010	0.23	010	010	0.10	0.10	0.10	010	10	050	0.5 U	0.5 U	0.5 U	0.50	0.5 U	050
MW-C2	AA91353	7/13/1999	UG/L	0.10	0.1 0	010	0.2.0	0.1 U	ΑN	0.1 U	0.1 U	0.1 U	010	0.1 U	010	010	0 + 0	0.1 U	0.1 0	0.1 U	010	0 10	ำกา	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	150
MW-N2	AA85332	9/21/1999	UGAL	0.1 U	U 1:0	0.1 U	0.2 U	0.1 U	0.10	0.10	310	0.1.0	010	D 1.0	0.1 U	010	010	2 + 0	010	0.10	0.13	010	7.0	U 6.5	0.5 U	0.5 U	0.50	0.5 U	050	0.50
Class (la	Ground Water	Quality Standards	UGAL	0.04	0.02	0.2	0.5	ΨX	0.03	0.4	0.4	0.4	2	¥	¥	0.2	0.4	0.5	07	9.4	0.1	0.1	 	9.0	0.5	0.5	0.5	0.5	0.5	50
		CAS	Number	309-00-2	319-84-6	319-85-7	57-74-9	319-86-8	60-57-1	959-98-8	33213-65-9	1031-07-8	72-20-3	7421-93-4	53494-70-5	58-89-9	76-44-8	1024-57.3	72-43-5	72-54-8	72-55-9	50.29-3	8001-35-2	12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11005.82.5
Client Sample (D:	Verifiech Sample 10.	Sampling Date:	Units:	Aidrin	Alpha-BHC	Beta-BHC	Chiordane	Delta-BHC	Dielarin	Endosulfan i	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Gamma-8HC	Heptachlor	Heptachlor Epoxide	Methoxychlor	G00-d'd	9.PDOE	P.P. 001	Toxaphene	Araclar-1016	Aroclor-122	Aroclor-1232	Arodor-1242	Aroclor-1248	Aractor-1254	Arnelor-1260

J. Kalatyte detected below MDL and/or estimated concentration
UG1. Micrograms per Liter, Equivalent to parts per button
U Not detected at the PQL
NA Not Available
Shaded Values Exceeded Corresponding Cleanup Critera

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Table 16 Summary of the Inorganic Analysis For Groundwater Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	CAS Number	Class IIa Ground Water Quality Standards (ppm)	MW-N2 AA95332 9/21/1999 UG/L	MW-C2 AA91353 7/13/1999 UG/L	MW-C3 AA91297 7/12/1999 UG/L	MW-C4 AA91354 7/13/1999 UG/L	MW-C5 AA91355 7/13/1999 UG/L	F-BLANK AA91298 7/12/1999 UG/L	F-BLANK AA91356 7/13/1999 UG/L	FB-1-092199 AA95336 9/21/1999 UG/L
Antimony	7440-35-0	20	2.1	1.5 U	1.5 V	1.5 ປ	1,5 U	1.5 U	1.5 U	1.5 U
Arsenic	7440-38-2	8	3.7 ()	12	11	3.8	6.2	3,7 U	3.7 U	3.7 U
Barium	7440-39-3	2000	24	67	120	28	56	4.5 U	4.5 U	4.5 U
Beryllium	7440-41-7	20	0.86 U	0.86 U	0.86 Ų					
Cadmium	7440-43-9	4	1.2 U	_ 1.2 U	1.2 U	1.2 Ú				
Chromium	7440-47-3	100	10 U	10 1	10	10 U	10 U	10 0	10 U	10 0
Copper	7440-50-8	1000	6.1	4.4	3.1	4.1	3.2	2.7 U	2.7 U	5.7
Lead	7439-92-1	10	12	3.1 U	3.1 U	_5.7	3.1 U	3.1 U	3.1 ∪	3.1 U
Mercury	7439-97-6	2	0.19 U	0.18 U	0 18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U
Nickel	7440-02-0	100	12 U	12 U	12 U	12 ป	12 U	12 U	12 U	12 U
Selenium	7782-49-2	50	3.7 U	3.7 ∪	3.7 ∪	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
Silver	7440-22-4	NA NA	0.78 U	Q.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Thallium	7440-28-0	10	3.6 U	3.6 U	3.6 U	3.6 U	3.5 U	3.6 U	3.6 U	3.6 U
Zinc	7440-66-6	5000	38 U	38 U	38 U	38 U	38.∪	38 U	38 U	38 ∪
Cyanide	57-12-5	200	10 U	<u>10</u> ป	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	103-95-2	4000	50 U	50 U	50 U	50 U	5D U	50 U	50 U	50 Ú
Chloride	16887-00-6	250000	380000	11000000	1700000	180000	1200000	1800 U	1300 U	1000 U
Total Suspended Solids		NA	140000	27999	20000	5200	24000	4000 U	. 3999 U	4000 U

NOTES:

ug/L - Micrograms per Liter, equivalent to parts per billion

U - Not detected at the MDL

J - Analyte detected below MDL and/or estimated concentration

NA - Not Available

Shaded Values Exceeded Corresponding Cleanup Criteria

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Table 17 Summary of Total Petroleum Hydrocarbons Groundwater Sampling Results Naporano and Hugo Neu Facilities Port Newark Newark, New Jersey

Client Sample ID:		Class IIa	MW-N2	MW-C2	MW-C3	MW-C4	MW-C5	F-BLANK	F-BLANK	FB-1-092199
Veritech Sample ID:		Ground Water	AA95332	AA91353	AA91297	AA91354	AA91355	AA91298	AA91356	AA95336
Sampling Date:		Quality	9/21/1999	7/13/1999	7/12/1999	7/13/1999	7/13/1999	7/12/1999	7/13/1999	9/21/1999
Units:	Number	(ppm)	UG/L	UG/L	UG/L_	UG/L	UG/L	UG/L_	UG/L	UG/L
Total Petroleum Hydrocarbons	23135-22-0	NA	1000 U	1100 U	5100	1100 U	1100 U	1000 U	_1100 U	1000 U

NOTES:

ug/L - Micrograms per Liter, equivalent to parts per billion

U - Not detected at the MDL

J - Analyte detected below MDL and/or estimated concentration

NA - Not Available

Page 1 of 1 GW Data 9-18-02.xls

TABLES

E 2-1

PORT NEWARK CONTAINER TERMINAL, LLC SOIL AND GROUNDWATER ANALYTICAL PROTOCOLS

Parameter Name	Matrix	Container	Analytical Method	Preservatives	Maximum Holding Time
Metals	Water	(1) 500 ml Polyethylene	USEPA 200.7	HNO ₃ to pH<2;	6 months
		bottle		Cool to 4°C	(Hg - 28 days)
Polynuclear Aromatic Hydrocarbons	Soil		SW846 8270C		7 days extract
]	40 days analyze
PCBs	Soil		SW846 8082]	7 days extract
		(1) 16 oz. Glass jar		Cool to 4°C	40 days analyze
Metals	Soil		SW846 6010B/7000]	6 months
]	(Hg - 28 days)
Total Solids	Soil		SM 2540G		28 days
				_	

FORMER MAERSK-C ERSAL TERMINAL SITE SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000

_ _														$\overline{7}$
 						PO-BH02	A PO-BH02B-	PO-BH02C-	PO-BH02D-	PO-BH02E-	PO-BH13A-	PO-BH13B-	PO-BH13C-	- PO-BH13D-
	Residential	Non-Residential	Impact to		Sample ID:	090800	090800	090800	100200	100200	090700	090700	090700	100300
Į	Direct	Direct	Groundwater		Lab ID:		AB14582	AB14583	AB16057	AB16058	AB14489	AB14490	AB14491	AB16059
i	Contact Soil	Contact Soil	Soil	Sampling (Depth (Ft bgs):	11-11.5	11-11.5	11-11.5	11-11.5	11-11.5	6.5-7	6.5-7	6.5-7	6.5-7
i	Cleanup	Cleanup	Cleanup		Sample Date:	09/08/00	09/08/00	09/08/00	10/02/00	10/02/00	09/07/00	09/07/00	09/07/00	10/03/00
Contaminant	•	•		Method			al Rsit Qua	Rsit Qual	Rslt Qual	Rsit Qual	Rsit Qual	Rsit Qual	Rsit Qua	
Metals											<u>-</u>	<u> </u>	 _	<u> </u>
Chromium 1	120,000	NC	NC	EPA 6010	MG/KG	46	500	390	380	570	600	380	610	240
Copper	600	600	NC I	EPA 6010	MG/KG	i				}				1 1
Lead	400	600	NC (EPA 6010	MG/KG	ĺ	Ţ	[[[1		[[]
Mercury	14	270	NC	EPA 7471A	MG/KG			J			1	1	1	
Thallium	2	2	NC	EPA 6010	MG/KG								ĺ]
Zinc	1,500	1,500	NC	EPA 6010	MG/KG	120	1,500	150	740	420				1 1
Polychlorinated Bipl	henyls (PCB)					!]				1			1
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG							1		1
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG			(1	1
Aroclor-1232	0.49	2	50	EPA 8082	MG/KG	ļ	1	i	(i 1
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG						ļ			l í
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG							1		
Aroclor-1254	0.49	2	50	EPA 8082	MG/KG			l						
Aroclor-1260	0.49	2	50	EPA 8082	MG/KG									} I
Polynuclear Aromati		ons (PAHs)				ĺ		l		1				
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG	1	Ĭ				[
Benzo[a]pyrene	0.66	0.66	100	EPA 8270	MG/KG			1						
Benzo(b)fluoranthene	0.9	4	50	EPA 8270	MG/KG				1]
Benzo[g,h,i]perylene	NC	NC	NC	EPA 8270	MG/KG	ł	1	1		1]
Benzo[k]fluoranthene	0.9	4	500	EPA 8270	MG/KG		1				}			
% Solids			i	SM 2540G	%	75	61	64	64	55	66	66	65	73

Note:

¹ Chromium -trivalent (III) Concentrations and Values

Exceedance of Most Stringent Criteria

NC or "--" No Criteria Exists

U Not Detected above Method Detection Limit Shown in Result Column

J Estimated Concentrations
B Below Sample Quantitation Limit
BLANK Indicate Not Analyzed
ft bgs feet below ground surface

Taken from NJDEP's "Cleanup Standards for Contaminanted Sites, N.J.A.C. 7:26D."

Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1,

identified as BH-MW-02A, BH-MW-02B, etc...

Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with Borrings in Figure 1 identified as BH-MW-13 and BH-MW-14

^{* -} Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.

È 3-1

FORMER MAERSK-DINIVERSAL TERMINAL SITE SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000

						Τ	\neg			T-	T	Τ		т——	
] РО-ВН1	3E F	PO-BH14A-	PO-BH14B-	PO-BH14C-	PO-BH14D-	PO-BH14E-	PO-BH14F-	PO-BH	114G-
ļ	Residential	Non-Residential	Impact to		Sample ID:	10030	0	090700	090800	090800	090800	100300	100300	1003	
Ŋ	Direct	Direct	Groundwater		Lab ID:	AB1606	60	AB14492	AB14584	AB14585	AB14586	AB16061	AB16062	AB16	063
	Contact Soil	Contact Soil	Soil	Sampling (Depth (Ft bgs):	6.5-7	·	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-	-2
	Cleanup	Cleanup	Cleanup	Analysis	Sample Date:	10/03/0	00	09/07/00	09/08/00	09/08/00	09/08/00	10/03/00	10/03/00	10/03	3/00
Contaminant				Method	Unit	Rstt Q	ual R	Rsit Qual	Rsit Qual	Rsit Qual	Rsit Qual	Rsit Qual	Rsit Qual	Rsit	Qual
Metals		_ `						-							
Chromium ¹	120,000	NC	NC	EPA 6010	MG/KG	270					l				
Соррег	600	600	NC	EPA 6010	MG/KG			480	3,500	510	1,200	720	580	230	
Lead	400	600	NC	EPA 6010	MG/KG		Ϋ́E	B,000	2,800	*#####################################	1 200 2 500	720 35,000	2900)	ETUE	I
Mercury	14	270	NC	EPA 7471A	MG/KG	1		9.2	≥\38 v	**18	12	19	4.3	8.1	1
Thallium	2	2	NC	EPA 6010	MG/KG					All the second of the second o	1	713			
Zinc	1,500	1,500	NC	EPA 6010	MG/KG		1	1,100	32300	1,200	2,100	1,300	1,800	860	
Polychlorinated Bipl	nenyls (PCB)													İ	
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG]					
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG										1
Aroclor-1232	0.49	2	50	EPA 6 0 62	MG/KG								ļ		
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG	ł		2.3	8.2	4	5 6 1	2.2	1,7	0:96**	
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG	1			ľ				ļ		
Aroclor-1254	0.49	2	50	EPA 8082	MG/KG									i	
Aroclor-1260	0.49	2	50	EPA 8082	MG/KG		138	2	.6.2	3.37	4.9	111	4.4	644	
Polynuclear Aromati	ic Hydrocarb	ons (PAHs)												P. P. V. V. V. V. V. V. V. V. V. V. V. V. V.	J
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG	i		2	37	14%5	4.4	2 1:3	0.69 J	0.94	
Benzo(a)pyrene	0.66	0.66	100	EPA 8270	MG/KG	ŀ		· 2 1.9 29	**3	With the	3.8		0.43 J		J
Benzo[b]fluoranthene	0.9	4	50	EPA 8270	MG/KG			2.9	6 4 A Pr	0.92 U	5.7	1.8	0.68 J		
Benzo(g,h,i)perylene	NC	NC	NC	EPA 8270	MG/KG			-4173		The San Laboration of the Control of	Waters of the barriers			}	
Benzo(k)fluoranthene	09	4	500	EPA 8270	MG/KG	_		1.5	#3d+2	5 30 °	3.6	*11 (P)	0.37 J	0.58	J
% Solids				SM 2540G	%	71		88	90	91	90	94	88	95	

Note:

Exceedance of Most Stringent Criteria

NC or "--" No Criteria Exists

U Not Detected above Method Detection Limit Shown in Result Column

J Estimated Concentrations
B Below Sample Quantitation Limit

BLANK Indicate Not Analyzed ft bgs feet below ground surface

Taken from NJDEP's "Cleanup Standards for Contaminanted Sites, N.J.A.C. 7:26D."

Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1, identified as BH-MW-02A, BH-MW-02B, etc...

Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with Borrings in Figure 1 identified as BH-MW-13 and BH-MW-14

¹ Chromium -trivalent (III) Concentrations and Values

^{* -} Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.

FORMER MAERSK-UNIVERSAL TERMINAL SITE SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000

				 -		F	
						PO-BI	J1/1H_
	Residential	Non-Residential	Impact to		Sample ID:		
	Direct	Direct	Groundwater		Lab ID:	AB16	
	Contact Soil	Contact Soil	Soil	Sampling I	Depth (Ft bgs):		
	Cleanup	Cleanup	Cleanup	Analysis	Sample Date:		
Contaminant	Cleanop	Cleanup	Cicariop	Method	Unit	Rslt	Qual
Metals							
Chromium ¹	120,000	NC	NC	EPA 6010	MG/KG		
Copper	600	600	NC	EPA 6010	MG/KG	520	ĺ
Lead	400	600	NC	EPA 6010	MG/KG	2,500	·
Mercury	14	270	NC	EPA 7471A	MG/KG	13	<i>*</i>
Thallium	2	2	NC .	EPA 6010	MG/KG		
Zinc	1,500	1,500	NC	EPA 6010	MG/KG	10,000	2 9
Polychlorinated Bipl	henyls (PCB)						.•
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG		ĺ
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1232	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG	5.9	0
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG		
Arocior-1254	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1260	0.49	2	50	EPA 808 2	MG/KG	6.5	ĝ
Polynuclear Aromati	ic Hydrocarbo	ons (PAHs)					.
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG	2.4	i i
Benzo[a]pyrene	0.66	0.66	100	EPA 8270	MG/KG	1.7	
Benzo[b]fluoranthene	0.9	4	50	EPA 8270	MG/KG	7-0	Ģ.
Benzo[g,h,i]perylene	NC	NC	NC	EPA 8270	MG/KG		
Benzo(k)fluoranthene	0.9	4	500	EPA 8270	MG/KG	1.4	Ž
% Solids				SM 2540G	%	88	

Note:

Exceedance of Most Stringent Criteria

NC or "--" No Criteria Exists

U Not Detected above Method Detection Limit Shown in Result Column

J Estimated Concentrations
Below Sample Quantitation Limit

BLANK Indicate Not Analyzed ft bgs feet below ground surface

Taken from NJDEP's "Cleanup Standards for Contaminanted Sites, N.J.A.C. 7:26D."

Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1,

identified as BH-MW-02A, BH-MW-02B, etc...

Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with Borrings in Figure 1 identified as BH-MW-13 and BH-MW-14

¹ Chromium -trivalent (III) Concentrations and Values

^{* -} Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.

TABLE 3-2 FORMER MAERSK-UNIVERSAL TERMINAL SITE SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN GROUNDWATER SAMPLES PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER 2000 and APRIL AND MAY 2002

	New Jersey Groundwater Quality	Sample ID: Lab ID: Sample Date:	09190 AB1	W-14A- 0WG1 5185 0/2000	09190 AB1	V-12SB13- 00WG1 5186 0/2000	04200 AB5	MW05- 2WG01 56164 0/2002	042002	6165	042302 AB5	1W14- 2WG01 6228 5/2002	053 P2830	-MW11- 3102 6-01 S 1/2002
Contaminant	Standards	Unit	RsIt	Qual	Rslt	Qual	Rsit	Qual	Rslt	Qual	Rslt	Qual	Rsit	Qual
Metals		-			<u> </u>	-			T = -		T = =	-		
Antimony	20	UG/L			3.3	υ								
Arsenic	8	UG/L	3.6	U	3.6	Ü	4	U	17.			ĺ	3.4	В
Lead	10	UG/L	5.1						1 200 St. Southern St. Marketine		5.0	υ		
Thallium	10	UG/L_	<u> </u>		3.1	U			<u></u>	_	<u></u>			

Note:

Exceedance of Most Stringent Criteria

B Below contract required detection limit/above instrument detection limit
U Not Detected above Method Detection Limit Shown in Result Column

BLANK Indicate Not Analyzed

Taken from NJDEP's "Cleanup Standards for Contaminanted Sites, N.J.A.C. 7:26D."

APPENDIX A

TI ORTAUTHORITY OF NY & KL

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

. <u></u>					SHEET / OF										
PN -	. b) 4	2 7 -			NA	ME OF CONT		I	ORING NO.	SURFACE ELEV.					
CATION	PO 1	OITS FIC				Craig	Dr. Iling		BH-MW-ZA						
CATION	New of	Mw-Z							476-99-04	9/8/0N					
POON		CASING S		TYPE				GROU	ND WATER LEVEL	11000					
<u>3 ~</u>	D.D. 7 1/8	HAMMER	5 _ 3	<u>L</u>		Date	Time	Depth		emarks					
MMER	SAFOT	HAMMER				4/8/00	127		<u> </u>						
ORILLER	FALL JU		# FALL			1/0100	100			Tan Botween					
	_ 8	Pernell							6 +11'						
SPECTOR	De	House													
:ASING	DEDTU	SPOON BLOWS/6"	RE- 1	SAMP.2 NO.	1	-			RIPTION AND REMAR						
OWS/FT.	DEPTH <	BEOWS/6"	COVD	NO.	LINE LOCATES CHANGE OF PROFILE C/G C/15/hed 57cm Lic										
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE POR! AUTHURITY OF IN.Y & IN.J.

GINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
PID READINGS

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.DRING N	10. BM-	MW-2A	- 	 	DATE:	9/8/0	
ELD REA	OINGS BY:	HU-ZA DHere			PID Model:	9/8/ac	
		IN-SITU	HEAD-	BREATHING			
TIME	SAMPLE No.		Space Reading	Zone	`	REMARKS	
A-M	1.		0.0				
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THE PCT AUTHORITY OF N. ... & N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

<u> </u>			Sheet 3 of 3
PROJECT: PN- OJC POITS	Fic		
OCATION: +5' Ne of Me.	-2	DATE:	9/8/a
BORING No: BA- MW-ZA-	TOTAL No. OF SA	AMPLES: (Sal
SIGNATURE OF ALL			
'RESENT AT SAMPLING		99888889898888888888888888888888888888	3094803888888888888888888888888888888888
RELINQUISHED	DATE 9/8/02	RECEIVED	•
JY (SIGN)	TIME	BY (SIGN)	99888999999999999999999999999999
ELINQUISHED	DATE	RECEIVED	
BY (SIGN)	TIME	BY (SIGN)	
ELINQUISHED	DATE	RECEIVED	<u> </u>
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Th. PORT AUTHORITY OF MY & M.

Engineering Department Construction Division **Materials Engineering Section**

BORING REPORT

							SHEET / OF 3		
PROJECT	AD 1 ac aD				NAME OF CONTE			ORING NO.	SURFACE ELEV.
P/V-	rao gr	OTS Fac			Crais	Drillia		BX-MU23	
CATION	N- 0				J	•	C	ONTRACT NO.	DATE
#51 \$POON	NE OT	MW-Z CASING SI	ZE HOLE	TVDE				426-99-006	9/8/oc
3 4	0.0. 2 36.			: ITPE		 -		ND WATER LEVEL	
AMMER	0.0. 0 No	TLD. HUNNER	<u> </u>		Date	Time	Depth	Re	emarks
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CRILLER			FFALL		1/8/00			190 WATOF EN	COUN LOY OF
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SPECTOR								-	
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CASING .OWS/FT.	(DEPTH	SPOON BLOWS/6"	RE- 1	SAMP. ² NO.		3SAN	APLE DESCI	RIPTION AND REMARK	_
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHURITY OF IN. Y & IN. V.

IGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

						Sheet	2 of 3
re I:	PN-PO	HO POYTS 1 MW-ZB DHowe					
ORING No	Bh-	MW-2B			DATE:	9/8/oc MINIRAS	
FIELD READ	INGS BY:	Down			PID Model:	MINI RAB	
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	3	REMARKS	
BM	1		00				
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THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

<u></u>			Sheet 3 of 3
OCATION: 25' NE of Mu			
OCATION: 25' NE of Mu	1-2	DATE: 9/8/00	
BORING No: BH-MW-2B	TOTAL No. OF SA	MPLES: 1 Sou	/
SIGNATURE OF ALL			
RESENT AT SAMPLING	58883666888888888888888888888888	98989999998888888888888888888888888888	88900 <u>880008800800000000000000000000000</u>
RELINQUISHED	DATE 9/8/20	RECEIVED	
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Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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ROJECT	p La A) T. I			NAME OF CONT			BORING NO.	SURFACE ELEV.
PN-	100	Ports Fac			Craigi	Drilling		BN-MURC	
	with o	f MW-Z					J	CONTRACT NO. 476-99-006	DATE 9/8/cc
POON		CASING	IZE HOLE	TYPE			L	UND WATER LEVEL	1/100
3 .	o.o. 83/	MAMMER			Oate	Time	Depth		 emarks
MMER	Safat				6/1	, 40			
	FALL 30	<u> </u>	/ FALL		9 Kke	1-0	Dry	No water.	ex countaros
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NOTES: 1 — Length recovered; 0* — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane

3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PURI AUTHORITY OF IV. T & IV. J.

GINEERING DEPARTMENT
Materials Engineering Division
PID READINGS

		- - <u></u> -	<u> </u>			Sheet	2_of}
<u>'9C</u> :	PN- P)	to Ports	Fec				
DRING N	o. 84-	MW-50	<u>/</u>		DATE:	9/8/00	
=======================================	DINGS BY:	O POVIS.			PID Model:	9/8/co Mini RBG	
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading		REMARKS	
'PM	1.		0.0				
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THE PCAT AUTHORITY OF N. L. N.J.

ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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_ PORT AUTHORITY OF MY & ML

Engineering Department Construction Division **Materials Engineering Section**

BORING REPORT

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PHOJECT)		~			NAME OF CONT	RACTOR		BORING NO.	SURFACE ELEV.
	to Pol	157	-ec			Crais	Utilling		BH-MU-ZD	
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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VGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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JORING N	o. By-	MW-21	>		DATE:	10/2/00	
	DINGS BY:	Drong			PID Model:	10/2/oc	
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading		REMARKS	
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ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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PROJECT: PN-Oto Ports Fic			
OCATION: HOST' Southot BY-1		DATE:	10/2/cc
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The PORTAUTHORITY OF MY & ML

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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PROJECT	0 . 0	~ ~			NAME OF CONT			BORING NO.	SURFACE ELEV.
PN- CATION	rou Pa	orts Fac			Craig	Drilling		BH-MWZE	
E 25	'NE	A BH-	Mar	2 B		•		CONTRACT NO. 476-99-006	DATE 10/2/ac
SPOON	1100	CASING SI	ZE HOLE	TYPE			GBO	UND WATER LEVEL	10/2/00
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3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.
FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006

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GINEERING DEPARTMENT TERIALS ENGINEERING DIVISION PID READINGS

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ORING No	о. ВН-М	w-2E			DATE:	IdIzloc Min, DAE	
FIELD REAL	DINGS BY:	PHowe	nice di decenio de la constante de la constante de la constante de la constante de la constante de la constante		PID Model:	MIN, PAE	10000000000
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THE PORT AUTHORITY OF N.Y. N.J.

ENGINEERING DEPARTMENT
MATERIALS ENGINEERING DIVISION
CHAIN OF CUSTODY RECORD

			Sheet 9 of 9
PROJECT: PN- Pto Poll's	Fr		
OCATION: \$25 / NE OT BX		DATE: 10/2/0	<u> </u>
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THE PORT AUTHORITY OF MY & ML

Engineering Department Construction Division Materials Engineering Section

BORING REPORT

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-nOJECT	01.	0 4 5			NAME OF CONT			BORING NO.	SURFACE ELEV.
PN-	Pto	Ports Fro			Craig	Drillin	4	BH- MW-13A	<u> </u>
CATION	A.	3.47. 15			0		1	CONTRACT NO.	9/7/oc
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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# VGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

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BORING	lo. BX	-MW-13A	<u></u>		DATE:	9/7/00	
FIELD REA	ADINGS BY:	OHou			PID Model:	9/7/00 Min, RB5	
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TIME	SAMPLE No.			Zone		REMARKS	
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## THE PORT AUTHORITY OF N. V & N.J.

_			Sheet $3$ of $3$
PROJECT: PN- Pto Por	rs Fic		
OCATION: \$5' NWot.	Mu-B	DATE: 9/7/9	——————————————————————————————————————
BORING No: BH-MW-13A		SAMPLES: ( Sc.	/
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## THE PORT AUTHORITY OF MYS MU

**Engineering Department** Construction Division Materials Engineering Section

### **BORING REPORT**

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ROJECT	Pin	0.5 =			NAME OF CONT			BORING NO.	SURFACE ELEV.
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	NE A	MW-13				•	<b>'</b>	CONTRACT NO.	DATE 9/7/00
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	FALL		# FALL		9/7	15	Don		
PILLER		P Parnell							_
SPECTOR		OHowe							
ASING		SPOON	RE- 1	SAMP.2				CRIPTION AND REMAR	
DWS/FT.	DEPTH <	BLOWS/6"	COA.D	NO.	No. b. 07=		NE LOCAT	ES CHANGE OF PROFIL	.E <u>0.0</u>
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

# THE POPT AUTHORITY OF N.Y & N.J.

### IGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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BORING No	· BN-	MU-13B			DATE:	9/7/00	
TELD READ	INGS BY:	DHow			PID Model:	9/7/0c Mm, PH=	
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading		REMARKS	
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# THE POOT AUTHORITY OF N.Y. N.J.

			Sheet 3 of 3
PROJECT: PN- Pdo PONS FOR			
OCATION: \$5' NEOF MW-13		DATE: 9/70	loc -
BORING No: BH- MW- 13B	TOTAL No. OF	SAMPLES: /	50.1
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## THE PORTAUTHORITY OF MY & MU

**Engineering Department** Construction Division Materials Engineering Section

#### **BORING REPORT**

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PROJECT	Pto P	orTs Fac			NAME OF CON	TRACTOR	 Vレ	BY-MW-13C	SURFACE ELEY.
CATION	C 41							CONTRACT NO.	DATE
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SPOON	L. Huy	210 CASING SI	1100	₹.	Date	Time	Depth	UND WATER LEVEL	lemarks
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PRILLER	P	Pernell							
MSPECTOR	<u> </u>	Your							
CASING .OWS/FT.	DEPTH	SPOON BLOWS/6"	RE- 1	SAMP, ² NO.	<u> </u>			SCRIPTION AND REMAR IES CHANGE OF PROFIL	E 00
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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# IGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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BORING No.	BH M	U Ports 1 W-13C D Howe			DATE:	9/7/00 Mm, RAE	
TELO READIN	IGS BY:	D How			PID Model:	MINI RAE	
		IN-SITU	HEAD-	BREATHING			
TIME	SAMPLE No.	Split Spoon Reading	Space Reading	Zone Reading	_	REMARKS	
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			- <u></u>		Sheet	3 of 3	
PROJECT: PN- Pto Ports Fac	<u>.                                    </u>						
OCATION: \$5' South of MW-13	}		DATE:	9/7/0	·0		
BORING No: BH- MW-13C		. No. OF SA	MPLES:	1 So,	 k		
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## THE PORT AUTHORFTY OF MYS MA

**Engineering Department** Construction Division Materials Engineering Section

### **BORING REPORT**

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POJECT	PLA	Part E			NAME OF CON		_	BORING NO.	SURFACE ELEV.
PN-	700	Ports Fac	<u> </u>		Craig	Drilling		BH-MW-13D	
+25°		A BUL	MW-	-130				CONTRACT NO.	10/3/cm
#200N	<u> </u>	casing s	ZE HOLE	TYPE				<u>426-99 006</u> UND WATER LEVEL	1016/00
				1	Date	Time	Depth		marks
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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# GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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FIELD REAL	DINGS BY:	77 X X			DATE:	MINI ROS
					PID Model:	MINI ROS
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATH Zone Readin		REMARKS
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# THE PCT AUTHORITY OF N. & N.J.

		_	Sheet 3 of 3
PROJECT: PN- PTO POYTS	Fre		
OCATION: £75 Southat B	A-MW-13C	DATE: 10/3/0	0
BORING No: BX-MW-130	TOTAL No. OF		
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#### THE PORTAUTHORITY OF MY & ME.

**Engineering Department** Construction Division Materials Engineering Section

#### **BORING REPORT**

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PROJECT					NAI	ME OF CONT	RACTOR		BORING NO.	SURFACE ELEY.
PN-	PZO	PorTs F	चेट.		(	Ctary.	Drilling		BJ-MU-13E	
1 CATION	,	_							CONTRACT NO.	DATE
FOON SPOON	NWd	BH-NW	- 13 A						426-99-006	10/3/00
SPOON		CARING ST	ZE HOLE	TYPE				GRO	OUND WATER LEVEL	
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INSPECTOR		DHowe		,						
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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# IGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of }

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ORING No	. BH-1	MW-13E	-		DATE:	10/3/00	
FIELD READ	NINGS BY:	DHowe			PID Model:	10/3/00 Mm, PD5	
TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD- Space Reading	BREATHING Zone Reading	i 	REMARKS	
PM	1.0-2.5'		0.0				
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# THE PORT AUTHORITY OF N.V.& N.J.

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BORING No: AN- MW- 13 E	TOTAL No. OF SAM		
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**Engineering Department** Construction Division Materials Engineering Section

#### **BORING REPORT**

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HOJECT	Pto 1	2VI	Fac			NAME OF CONT	PACTOR Dilling	,	BH-MW-14A	SURFACE ELEV.
CATION	i that	MI	11/						CONTRACT NO. 426-99-006	DATE /
POON	D.D. HURV		CASING S	IZE HOLE	TYPE				UND WATER LEVEL	
MUER *C	J.D. 170 XV	″I.D.	HAMMER		<u>'</u>	Date	Time	Depth		marks
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PILLER	P	PON	wall					7		
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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# IGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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GELD REA	ADINGS BY:	Whow.		<del></del> -	PID Model:	9/7/0c Mini RBB	
		IN-SITU	HEAD-	BREATHING			
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# THE PORT AUTHORITY OF N.V.& N.J.

			Sheet 3 of 3
PROJECT: PN - Pto Ports Fac			
OCATION: # # 3' Southot MW BORING No: BH-IMW-14A	1-14	DATE: 9/7/00	 c
BORING No: BY-IMW-14A	TOTAL No. OF SA		
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**Engineering Department** · Construction Division Materials Engineering Section

### **BORING REPORT**

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E3 West of MW-14  SPOON  LOND TUCK IND  CASING SIZE HOLE TYPE	1486-99-0	
SPOON CASING SIZE HOLE TYPE	GROUND WATER LEVI	
AMMER HAMMER	Date Time Depth	Remarks
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D Howe		
CASING SPOON RE- 1 SAMP.		
OWS/FT. DEPTH BLOWS/6' COV'D NO.	LINE LOCATES CHANGE OF P	ROFILE C.O.
	Asphalt Crushed Slave	10
Mand Auger Foll 1	Misc F. 11- Cudry, Sand, Concret-1	Silf, mutil, enc 2,c
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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# GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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# THE PORT AUTHORITY OF N.Y. & N.J.

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PROJECT: PN -Pto Ports Fac				
OCATION: ± 3' WOST of NW-14	7	DATE:	2/8/00	
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SIGNATURE OF ALL	<del></del>			
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**Engineering Department** Construction Division **Materials Engineering Section** 

### **BORING REPORT**

NAME OF OHTRACTOR OF SONNO NO. SUPPACE LESS.  NAME OF CONTRACTOR OF PARTY OF THE CONTRACT NO. SUPPACE LESS.  CASTOR MULTIPLE OF MULTIPLE CONTRACT NO. 126-79-006 9/8/ac ONTRACT NO. 126-79	ROJECT					<del>                                      </del>				SHEET OF 3
RATION  3 BACT OF MU-14  1 BOON  CASING SIZE HOLE TYPE  Date  Time  Depth  SPALL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRILL  PRIL	PN	Pta	0 To 15			NAME OF CONT	RACTOR //			SURFACE ELEV.
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SASING OWS/FT. DEPTH BLOWS/6" COV'D NO.  ASSING OWS/FT. DEPTH BLOWS/6" COV'D NO.  Hand Augy T-UII   Misc Fill Sand Chadas Oreus (Concrete, Ext. 20)  Sample Chacked with 110 Misc.  Sample "/ 1.5.2" Sand for To June  Remaining Sample Discardar	MMER		HAMMER						<del></del>	
Sample Chakad with 100 Metry  Sample Chakad with 100 Metry  Sample Chakad with 100 Metry  Sample Chakad with 100 Metry  Sample */ 152' Savad Guttering  Remaining Sample Description and Remarks  Line Locates Change of Profile  Oc.  Sample Chakad with 100 Metry  Sample */ 152' Savad Guttering  Remaining Sample Describer  Remaining Sample Describer		FALL		# FALL_		9/8/cc		Dry		
DASING SPOON RE- 1 SAMP.2 SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC PROFILE OC STANDS ON THE COUNTY STONE OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC STANDS OF SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE OC SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE DESCRIPTION		0	Penne!	<u>//</u>				7		
Sample thoches with 15-2' Savad for India:  Sample to Sample Description and REMARKS LINE LOCATES CHANGE OF PROFILE  Oc.  Mand August I-ull  Misc Fill- Savad, andre Oravel, Conomic, Ext. 20  Bettomat Buring  Sample to Issaed with 110 Motor,  Sample to Issaed with 15-2' Savad for India:  Remaining Sample Uscardar	nspector Diawe									
Mand Augy T-111   Misc Fill - Sand, Condas, Orace, Concordo, Ext 20  Bettomat Buring  Sumple Chaokad with PID Metery  Sangle # / 1.5-2' Sand for Detail			SPOON							
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane

3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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# GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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JRING No	· BU-	MW-14C	· · · · · · · · · · · · · · · · · · ·	<del></del>	DATE: 9/8/00
IELD READ	INGS BY:	Offore			PID Model: MINI RBS
		IN-SITU	HEAD-	BREATHING	
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<u> </u>			Sheet 3 of 3
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PROJECT: PN- Pto Ports F. OCATION: \$3' Egst of Mu-14 BORING No: BH- MW-14 C		DATE: 9/8/	
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**Engineering Department** Construction Division Materials Engineering Section

#### **BORING REPORT**

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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# GINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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**Engineering Department** Construction Division Materials Engineering Section

#### **BORING REPORT**

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CATION	->			-		<del></del>		CONTRACT NO.	DATE
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NOTES: 1 — Length recovered; 0* — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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### **GINEERING DEPARTMENT TERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3 PN- Pdu Ports Fac BY-MW-14E 10/3/cc Often is No. DATE: DHouse **FIELD READINGS BY:** PID Model: MMEDE IN-SITU HEAD-BREATHING **SAMPLE** Split Spoon Space Zone REMARKS ·No. TIME Reading Reading Reading MA 0.0

## THE PORT AUTHORITY OF N.Y & N.J.

			Sheet 3 of 3
OCATION: #25' WOST of BX-			
OCATION: +25' WOST of BX-	Mu-	148 DATE: 10/3/00	2
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**Engineering Department** Construction Division Materials Engineering Section

### **BORING REPORT**

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ROJECT	0) (				NAME OF CONT			BORING NO.	SURFACE ELEV.
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H. 2T	" C T	L f PX	Nru-	· IU D	_			CONTRACT NO.	DATE 10/3/ca
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Youd .	D.D. BUS-L	∕*I.D.		]	Date	Time	Depth	UND WATER LEVEL	
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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane

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# VGINEERING DEPARTMENT .....TERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

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FIELD READ	INGS BY:	DNouse			PID Model:	Mini PAG	
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## PORT AUTHORITY OF MY & N.

**Engineering Department** Construction Division Materials Engineering Section

### **BORING REPORT**

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

# GINEERING DEPARTMENT FRIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3 PN - Pdo Ports Fie 2R(* BX-MW-146 OR. . No. 10/3/00 DATE: Drown HELD READINGS BY: MILL MAG PID Model: IN-SITU HEAD-BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME No. Reading Reading Reading FM 0.0

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**Engineering Department** Construction Division **Materials Engineering Section** 

### **BORING REPORT**

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NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used 2 — U = undisturbed; A = auger; OER = open end rod; V = vane 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

# NGINEERING DEPARTMENT ATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3 PN- Pdo Ports Fac ?T: BN- NW-14 H JOhns G No. DATE: 10/3/00 HELD READINGS BY: PID Model: RAG IN-SITU HEAD. BREATHING SAMPLE Split Spoon Space Zone REMARKS TIME No. Reading Reading Reading 0.9 DM

### THE PORT AUTHORITY OF N.Y & N.J.

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#### **ACKNOWLEDGEMENTS**

#### FOR THE PORT AUTHORITY

STATE OF NEW YORK )
)ss. COUNTY OF NEW YORK )
On the 5 day of of in the year 2004 has a representation and for said state, personally appeared DIRECTOR PORT COMMERCE DEPT. personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.
Marie Mahuan 3 - (notarial seal and stamp)
Marie M. Edwards FOR THE LESSEE Notary Public, State of New York No. 01ED4959693 Qualified in Kings County
STATE NEW Jersey )  State New Jersey )  State New Jersey )  State New Jersey )  State New Jersey )  State New Jersey )  State New Jersey )  State New Jersey )
COUNTY OF Essex
On the 5th day of October in the year 2004, before me, the undersigned, a Notary Public in and for said state, personally appeared Downlo P. Hamm, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person

(notarial seal and stamp)

ANDREA GOC NOTARY PUBLIC OF NEW JERSEY Commission Expires 2/27/07

upon behalf of which the individual acted, executed the instrument.

#### UNANIMOUS WRITTEN CONSENT OF MANAGERS OF PORT NEWARK CONTAINER TERMINAL L.L.C.

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, as amended, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 5 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to the addition of a 15-acre area to the Lease (the "Area A1A"), as such Area A1A is more fully depicted on Exhibit A-la attached to the Lease Supplement.

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager or President executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers or President of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and President of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

RESOLVED, that the managers and President of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or President executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or President and by the Board of Managers; and it is further

RESOLVED, that the managers and President and other officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all

2006

FMC Agreement No.: 201132-005 Effective Date: Monday, June 19, 2006 Downloaded from WWW.FMC.GOV on Tuesday, May 22, 2018 such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this Q\ day of September, 2004.

Gary Willm

Michael Seymour

Robert Agresti

Peter Duithuizen

Michael White

#### PORT NEWARK CONTAINER TERMINAL, L.L.C.

#### CERTIFICATE OF MANAGER

For purposes of reliance by The Port Authority of New York & New Jersey (the "Port Authority") in connection with supplement nos. 4 and 5 (collectively, the "Lease Supplements") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) between the Port Authority and Port Newark Container Terminal, L.L.C., a Delaware limited liability company (the "Company"), the undersigned hereby certifies that he is a manager of the Company, and further certifies that Don Hamm, whose specimen signature appears below, is the duly appointed President of the Company and that he is authorized to execute and deliver each of the Lease Supplements on behalf of the Company.

Name

Title

Don Hamm

President

IN WITNESS WHEREOF, the undersigned has executed this Certificate as of this 29th day of September, 2004.

Gary Willmot

imen Signature

Oct 1,2004

Manager

JOANN A. MCAISON

NOTARY PUBLIC OF NEW JESSEY Commission States 14/14/2007